APPENDIX 30B

COMMENTS AND RESPONSE REPORT (IN-PROCESS SCOPING PHASE)

COMMENTS AND RESPONSE REPORT
IN-PROCESS SCOPING PHASE
PROPOSED EXPANSION OF THE CAPE WINELANDS AIRPORT

(P10 OF FARM 724, RE OF FARM 724, P23 OF FARM 724, P7 OF FARM 942, RE OF FARM 474, P3 OF FARM 474 AND P4 OF FARM 474)

OCTOBER 2024

CAPE WINELANDS AERO

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Interested and Affected Parties Comments & Responses

No.	Name & Presenting unit	Issue/ Concern	Response
	Deferred Comments from Pre-Application Scoping Phase		
177	Natasha van der Berg - **SACPCMP**	*Email dated 3 July 2024:* 1. I am just following up on this – any outcomes that we could possibly utilise as a story for our SACPCMP magazine? Our next edition is the August/Sept edition with a deadline of 20 July. Please feel free to send anything through for our consideration to publish that may be of interest to the construction / construction health and safety / building inspector communities. *E-mail dated 11 July 2024:* 2. Dear Natasha Hope you're keeping well on your end!! I run the media and marketing side of things for the airport. Please see attached some information. Please let me know if you would like some visuals – I do have artist impressions. Regards Deidre *E-mail dated 11 July 2024:* 3. Dear Deidre, Yes – this would make a great feature in our magazine. Please send pics! Much appreciated	*Email response provided 4 July 2024:* 1. Good morning Natasha Thank you for the email. I am referring you to Deidre herein copied who is best placed to assist with your query.

In-Process Scoping Phase [30 day commenting period commencing on 24 July 2024 and up to and inclusive of 26 August 2024]			
178	DEADP EIA Admin	*Email dated 23 July 2024 [In response to IAP notification email]:* 1. The Directorate confirms receipt of your correspondence.	1. This comment is noted.
179	DEADP EIA Admin	*Email dated 23 July 2024 [In response to DEADP submission email]:* 1. The Directorate confirms receipt of your correspondence.	1. This comment is noted.
180	Vinod Nankhoo	*Email dated 23 July 2024:* 1. I have no comments. Not sure why this was sent to me as I am based in Durban, and we offer civil engineering consulting services. Thank you and wish you best of luck with this project	1. This comment is noted.
181	Patrick Bond	*Email dated 23 July 2024* 1. You might remember that last December I filed an objection. I'm searching my files and not finding any reply. Was it considered?	*Email response provided on 23 July 2024:* 1. All comments received during the pre-application phase for the proposed project were recorded and formally responded to in the Comments and Responses report, which is available for download from our website as part of the in-process Scoping Phase. Please follow the link: https://phsconsulting.co.za/proposed-expansion-of-cape-winelands-airport/ Please let me know should you require any further assistance.

182 & 214 & 242	Sean Bradshaw - **Airports Company South Africa**	*Email dated 24 July 2024:* 1. I have tried to access the PHS website, it appears to be offline, when trying to access via a work or private connection, Are you able to advise? Reply received on 24 July 2024: 2. Ok great it is now working,	*Email response provided on 24 July 2024:* 1. I tested it from our side and it seems to work. Can you please try again via the link https://phsconsulting.co.za/proposed-expansion-of-cape-winelands-airport/ Please confirm if you are successful to access 2. This comment is noted.
		Email dated 15 August 2024: 1. Any possibility of an extension on the deadline for responding to the In-Process Scoping report for the CWA EIA, my colleagues are asking for an additional week, If you could please let me know? *Email reply received on 21 August 2024:* *2.* I have received this time, thank you,	*Email response provided 15 August 2024:* 1. Unfortunately, no extension of timeline to provide comments on the in-process Scoping report can be granted past the COB deadline for 26 August 2024. The timeline for the NEMA process is regulated and requires submission of the final documentation to DEA&DP by 5 September 2024. Please note that an additional 30-day commenting period is allowed for in the Impact Assessment Phase of the NEMA process, and as a registered IAP you will be notified when this period starts. *Email sent on 21 August 2024: following a phone call between the IAP and PHS consulting:* *2.* Please confirm receipt of the email below.
		Email dated 26 August 2024: 1. Thank you for the opportunity to comment on the proposed expansion of Cape Winelands Airport's Scoping Report (DEA&DP ref: 16/3/3/6/7/2/A5/20/2209/23), Please find attached ACSA's comments, If you can kindly confirm receipt,	*Email response provided 26 August 2024:* 1. Thank you for the comments

		Letter received via email dated 26 August 2024: COMMENT ON PROPOSED EXPANSION OF CAPE WINELANDS AIRPORT, DEA&DP REFERENCE NO. 16131316171121A512012209123 & DWS REF NO: WU33620 The In-Process Scoping Report dated 22nd July 2024, appendices and letter informing I&APs of the above project, dated 23 rd July 2024, refers. We submit the following comments related to the In-Process Scoping Report and various appendices: 1. Need and viability of a second commercial international airport: 1.1. It is ACSA's understanding that this application for an EIA relates to the development of an airport for scheduled and unscheduled commercial domestic and international operations, the establishment of airport infrastructure for ICAO Code 4E instrument operations and ICAO Category 9 fire and rescue level of protection. We believe that the first question to be answered is whether Cape Town and South Africa needs a second commercial international airport in Cape Town. It is important to answer the following questions which are important to trigger a second city airport:	*Response to letter:* 1. 1.1. Response from CWA: ACSA's understanding is correct, this is achieved by expanding an existing and licenced airport that has been in existence and operated for the last 80 years. Following 4 years of assessments, specialist engagements and industry consultations the need for a second unrestricted commercial airport is evident. A narrow lens to regional accessibility has many risks. A key risk is the reliance on one domestic and international airport. Considering broader air access into the region mitigates the risks associated with relying on a single international airport. As Cape Town continues to grow rapidly, it's crucial to prepare for future demand proactively. A readiness program is essential now to ensure the region can meet this future demand, so that future leaders inherit a city equipped to handle its growth without being left behind. Globally competitive cities rely on unrestricted air access, which significantly improves its competitiveness and attractiveness. It's also important to note that almost all medium-sized cities around the world have more than one airport to manage their growing air traffic demands and to provide redundancy. For instance, cities like Milan have Malpensa and Linate airports, while Washington, D.C., operates with both Dulles and Reagan National airports. Similarly, London is served by multiple airports, including Heathrow, Gatwick, and Stansted. Even Windhoek, the capital of Namibia, operates two airports: Hosea Kutako International and Eros Airport. These examples demonstrate that a second airport can significantly enhance a city's connectivity and

		1.1.1. Does the current airport (Cape Town International Airport) have existing or future capacity constraints? This is also an important criterion in the National Airport Development Plan.	resilience, contributing to its long-term growth and sustainability. Most major cities in the world have more than one international airport. With two major airports in the Western Cape, South Africa becomes more accessible to both domestic and international tourism, trade and investment. 1.1.1. Response from CWA: The criterion as referenced by ACSA in the National Airport Development Plan is directly related to an international license application – which focuses solely on providing approvals for the processing of international passengers. This is a separate regulatory process, one which CWA will follow when it triggers its international license application. For completeness of information and in the interest of transparency CWA would however like to respond as follows: **Part 1: ACSA's ability to deliver capacity up to 45MPPA** ACSA puts forward CTIA's ability to deliver capacity as one of the main arguments as to why a second airport should not exist, when in fact this is but one consideration in a multitude of factors that should be considered when evaluating the need for a second airport. CWA notes ACSA's 5-year development plan. The basis for ACSA's argument is that CTIA can provide further capacity based solely on the fact that there is an airport master plan in place which indicates that the airport can grow up to 45MPPA. According to a publication by IATA *"Airport Master Plans: impact on capacity & efficiency, GANIS 2017 – Montreal, Canada…* • *An airport master plan is the airport's vision of how the ultimate development potential of the airport could be realised* • *It is a physical representation of an airport's long-term capital investment / business plan*

			• *It will provide an indication of how capacity enhancement may proceed over the short (0-10 year), medium (10-20 year) and long (20+ year) terms."* It is not *fait accompli* that CTIA will be able to develop the airport to this level of capacity. To reach the capacity of 45MMPA, CTIA will require a new second parallel runway (in addition to the new realigned runway), multiple terminal expansions, apron development, and so forth. None of these carry development rights or regulatory approvals at this stage. These development programmes will be subject to development planning and regulatory processes. The outcome of these development planning processes will then take broader considerations and impacts into account such as road access, bulk services, safety, noise, informal settlements, etc. It is therefore premature for ACSA to say that CTIA can grow to 45MPPA, when the required rights and regulatory approvals have not been obtained to substantiate such a statement. **Part 2: Capacity can not be the sole criterion for the assessment of a second airport** Capacity can also not be the only consideration in assessing the need for a second airport. A complete view of CWA's value proposition will have to be considered. Delivering additional capacity into the airport network, is but one. As a second airport CWA will: • Contribute to the City of Cape Town being more resilient, by adding airport capacity and redundancy to the airport system in Cape Town and the region, so that it is not only reliant on one airport. • Enable increased route profitability for all airlines flying into CTIA due to: ▪ Reduced fuel reserves ▪ Reduced fuel consumption

		1.1.2. Does the second airport serve a new market?	▪ Increased payload (passenger or cargo) ▪ Enable new market entrants due to increased route profitability, making Cape Town more competitive as a destination ▪ Drive a greener economy ▪ Enabling the airline industry to achieve their Net Zero target ▪ Contributing to greener skies due to reduced carbon emission reductions ▪ Enable economic development and improving social conditions during construction and for the lifespan of the airport's operation ▪ The expansion of CWA will require a workforce for all parts of the airport value chain, representing a massive recruitment opportunity, i.e. there will be large volumes of vacancies. As such CTIA's plans to deliver additional capacity is not a sufficiently compelling argument as to why CWA as a second airport should not exist. 1.1.2. CWA offers the following response: **Part 1: CWA's market strategy** CWA's market strategy is informed by research, data and extensive industry consultations. Amongst other factors, it delineates between regional-international and intercontinental scheduled services. As part of the strategy, unique opportunities have been identified. This is the basis on which CWA is willing to make a significant investment. CWA is mindful of disclosing the full detail of its market strategy, because this is privileged information, but can confirm the following: • General Aviation Services • Diversion Services

			• Domestic Scheduled Services
			• Regional-International Scheduled Services
			  ○ CWA as an international airport will contribute towards the growth and retention of current regional-international markets which are currently underserved
			  ○ CWA as an international airport will attract new regional-international markets which are currently unserved
			• Intercontinental Scheduled Services
			  ○ CWA as an international airport will contribute towards the growth and retention of current inter-continental markets which are currently underserved
			  ○ CWA as an international airport will attract new inter-continental markets, which are currently unserved
			
			Part 2: CWA's air traffic development for scheduled commercial traffic
			The approach towards Cape Winelands Airport's (CWA) introduction into the market is one of measured conservatism with CWA expected to process 5 million passengers per annum over 25 years. CWA is expected to have 25% market share (5 million of 20 million). This equates to CWA's own incremental growth of market share of a very gradual 1% per annum.
			
			Cape Town International Airport (CTIA) currently serves as the primary gateway to Cape Town. While CTIA is a well-established airport, the city has enjoyed tremendous growth in tourism, semigration and population, placing pressure on its transport systems. Although CTIA has future expansion plans to increase its capacity, there are multiple links in the value chain that can only be addressed by the introduction of a second airport, which once addressed will result in a net-gain in terms of air travel for the region.
			
			Considering the major capital expansion project that CWA is embarking on, which includes a 3.5km Code F runway, the

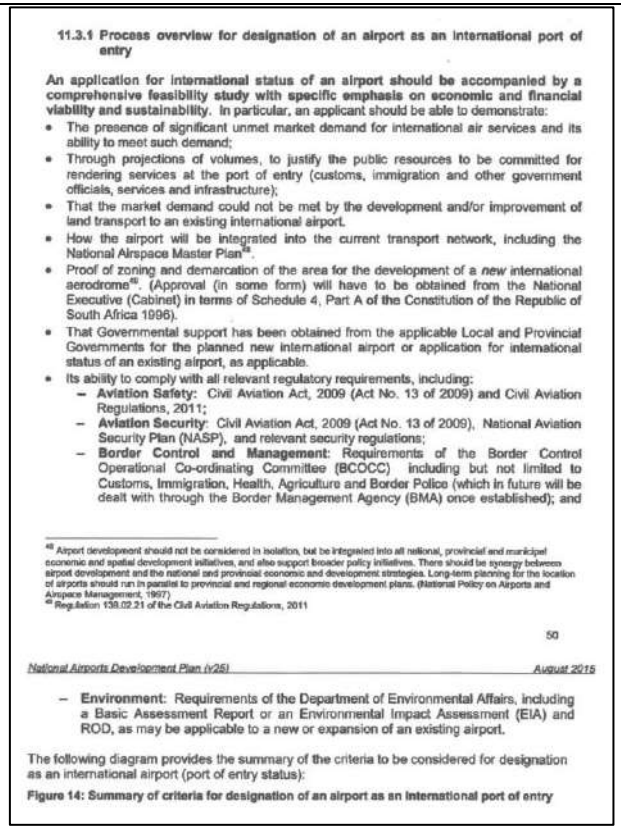
			gradual traffic growth may seem misplaced. However, the primary reason for CWA implementing such infrastructure is not just about scheduled passenger growth at its own airport – it is to specifically unlock the benefits enabled to the airline sector by introducing a much closer alternate airport for the purposes of diversions and fuel planning on flights inbound to CTIA from day one of the airport opening – as the same level of runway capability as CTIA is required in order to do so. CWA's conservative and measured approach to traffic development over the 25 years, will enable both CWA, CTIA and other airports to adjust their business plans in keeping with market shifts and growth by positively contributing to CTIA's and CWA's sustainability. The introduction of CWA is about enabling and accelerating growth of the market and not imposing limitations. **Part 3: Addressing ACSA's position on competition. ACSA stated that:** "We however do not support the development of CWA into an airport which processes scheduled commercial domestic and international traffic for the following reasons: • We believe that the two airports will compete for the same scheduled commercial domestic and international traffic and will therefore not be financially sustainable. " CWA's Response: ACSA has since its establishment had the benefit of operating CTIA for 30 years without competition. CWA's position is that competition in a free-market economy is critically important, this includes competing fairly with competitors, customers and suppliers, alike.

			Competition benefits both businesses and consumers. It shows companies where they need to improve; encourage organisations to strive for greater efficiency, become more innovative, more productive, and be better businesses, in other words ultimately satisfying unmet demand. It is CWA's view that ACSA should welcome the proposed investment into CWA as it helps to grow the SA airport network and sector as a whole, while de-risking ACSA's business through private sector investment. **Part 4: Addressing ACSA's concern relating to sustainability as a function of lower passenger volumes. ACSA stated that:** "We however do not support the development of CWA into an airport which processes scheduled commercial domestic and international traffic for the following reasons: • Due to the higher debt levels, lower passenger volumes and planned investment programmes, the airport must focus on sustained growth in passenger and air traffic growth to remain sustainable. Any dilution of traffic into CTIA will be a major risk to these planned investment programmes and to continued investment at CTIA. " CWA's Response: The regulatory framework as outlined in the Airports Company Act 1993, protects ACSA by granting a commercial return on assets and thus, as long as no unnecessary investments in infrastructure are made, the airports will always be sustainable. This is true for all airports in the ACSA network, including Cape Town International Airport and George Airport. CWA explained the regulatory framework as follows: • Sustainability of airports is not a one-dimensional issue related to traffic volume only. In fact, it plays a minor role. Many factors contribute to the sustainability of an

			airport. The most important factor is the matching of infrastructure investments and operational requirements to the traffic demand. • More than 80% of an airports input costs are usually of a fixed nature following an investment in infrastructure. • CTIA's latest infrastructure investments date to approximately 2010 with no major investments since. It has been 13 years, which means that most of CTIA's capital costs have already been paid for by (or recovered from) users and that it finds itself in an earn out phase, i.e. where the returns in excess of cost are being collected. This should be true even if the impact of COVID-19 is taken into account. The ACSA revenue model is based on airport charges that remunerate the ACSA asset base (which include CTIA) at a commercial rate of return. This means that the CTIA invested asset base will always be remunerated as long as infrastructure investments are driven by traffic demand for CTIA airport. • The impact that CWA will have on CTIA traffic demand will be reflected in the demand forecasts for CTIA. The demand forecasts determine future infrastructure development plans. CWA and CTIA will develop its unique traffic demand profile over time based on the needs of airport users. Each airport's response may therefore be different to satisfy those demands. This would be for the benefit of all airport users, i.e. airlines, passengers, cargo operators, etc. • As mentioned above, revenue is not an indicator of performance or sustainability. The argument is that over time, the assets to be remunerated through airport charges reduces in value (through depreciation) and thus lower and lower revenues are needed to allow the airport to earn commercial returns.

			• Traffic growth is not a contributing factor to ACSA's airports' sustainability. The ACSA funding model as determined by the economic regulator ignores traffic volumes (it was mentioned above that traffic volume is an input to infrastructure investment plans only) but rather determines a revenue requirement based on ACSA's asset base. Traffic volume has an impact on unit pricing only and only if ACSA invests in inefficient assets. As long as ACSA optimises its funding model by investing in assets that are needed (from its own specific demand) it can never be unsustainable. The regulatory framework cannot be refuted. While ACSA continues to raise the concerns over dilution of traffic into CTIA and the major risk it would pose to their planned investment programmes and continued investment at CTIA, the regulatory framework as outlined in the Airports Company Act 1993, protects ACSA by granting a commercial return on assets and thus, as long as no unnecessary investments in infrastructure are made, the airports will always be sustainable. This is true for all airports in the ACSA network, including Cape Town International Airport and George Airport. With the introduction of CWA, ACSA will have the opportunity to more efficiently allocate their capital expenditure in other business priorities at CTIA or across the ACSA network, investing in other parts of the country in need of the investment.
		1.1.3. Is there Government support for a second international airport, noting the associated investments, equipment and human resources required by aviation regulation and services like SACAA and ATNS and government agencies like SARS (including Customs), Border Management Authority (BMA) (including Department of Home Affairs, Port Health, Agriculture, Environment), SAPS, and bulk infrastructure requirements like roads, water, electricity, sewer to support a second commercial international airport.	1.1.3. CWA response: We confirm that CWA has secured written support from both the City of Cape Town and the Premier of the Western Cape, who recognize the significant economic and infrastructural benefits of the proposed development. CWA is actively engaging with national authorities to ensure compliance with aviation regulations and services, while adopting a phased approach to address these requirements in line with

			international standards. Additionally, CWA is working with municipal and provincial agencies to ensure bulk infrastructure needs are met, and is collaborating with customs, immigration, and security agencies to integrate seamless operational frameworks. With the backing of local and provincial government, CWA remains confident that the development will not only meet regulatory standards but also drive economic growth and connectivity for the Western Cape. CWA is committed to following a structured stakeholder engagement with all spheres of government. CWA is committed to consulting and engaging all relevant stakeholders and authorities as CWA advances its various applications and has been doing so since 2021. As a private international airport CWA understands that it will cover the costs associated with government agencies like SARS (including Customs), Border Management Authority (BMA) (including Department of Home Affairs, Port Health and Agriculture) providing services at the airport. CWA is committed to following all the necessary processes and will ensure that it remains compliant.
		1.2. It is common knowledge that a major airport expansion and new flight paths will bring associated environmental impacts and new noise zones around this airport. It will therefore impact the public and the need must thus be carefully considered and justified. 1.3. The National Airport Development Plan, Section 1 1.3.1 has the following requirements for the application for the designation of an airport as an international port of entry is as follows:	1.2. The comment is noted. The EIA process includes a Noise Impact Assessment, which will be circulated to all registered I&APs during the Impact Assessment commenting period. 1.3. The international licence application is a separate regulatory process to that of the EIA. CWA is aware of both the process and requirements as set out in the international application guideline and will comply accordingly.

		 **11.3.1 Process overview for designation of an airport as an international port of entry** **An application for international status of an airport should be accompanied by a comprehensive feasibility study with specific emphasis on economic and financial viability and sustainability.** In particular, an applicant should be able to demonstrate: • The presence of significant unmet market demand for international air services and its ability to meet such demand; • Through projections of volumes, to justify the public resources to be committed for rendering services at the port of entry (customs, immigration and other government officials, services and infrastructure); • That the market demand could not be met by the development and/or improvement of land transport to an existing international airport. • How the airport will be integrated into the current transport network, including the National Airspace Master Plan[48]. • Proof of zoning and demarcation of the area for the development of a *new* international aerodrome[49]. (Approval (in some form) will have to be obtained from the National Executive (Cabinet) in terms of Schedule 4, Part A of the Constitution of the Republic of South Africa 1996). • That Governmental support has been obtained from the applicable Local and Provincial Governments for the planned new international airport or application for international status of an existing airport, as applicable. • Its ability to comply with all relevant regulatory requirements, including: – **Aviation Safety**: Civil Aviation Act, 2009 (Act No. 13 of 2009) and Civil Aviation Regulations, 2011; – **Aviation Security**: Civil Aviation Act, 2009 (Act No. 13 of 2009), National Aviation Security Plan (NASP), and relevant security regulations; – **Border Control and Management**: Requirements of the Border Control Operational Co-ordinating Committee (BCOCC) including but not limited to Customs, Immigration, Health, Agriculture and Border Police (which in future will be dealt with through the Border Management Agency (BMA) once established); and [48] Airport development should not be considered in isolation, but be integrated into all national, provincial and municipal economic and spatial development initiatives, and also support broader policy initiatives. There should be synergy between airport development and the national and provincial economic and development strategies. Long-term planning for the location of airports should run in parallel to provincial and regional economic development plans. (National Policy on Airports and Airspace Management, 1997) [49] Regulation 139.02.21 of the Civil Aviation Regulations, 2011 50 *National Airports Development Plan (v26)* *August 2015* – **Environment**: Requirements of the Department of Environmental Affairs, including a Basic Assessment Report or an Environmental Impact Assessment (EIA) and ROD, as may be applicable to a new or expansion of an existing airport. The following diagram provides the summary of the criteria to be considered for designation as an international airport (port of entry status): **Figure 14: Summary of criteria for designation of an airport as an international port of entry** 1.4. It is important for the EAP to demonstrate the status of these various important steps in the application process. It is also essential that the EAP firstly considers that CTIA has sufficient capacity to accommodate additional domestic and international flights and has approved projects to further increase capacity. We will further substantiate this statement in our response. 1.5. Section 5.2 of the Draft Scoping Report speaks to the need and desirability of the proposed upgrade to CWA, and the expected doubling of air travel into Cape Town by 2050 (from about 10 million passengers per annum (mppa) to approximately 20 mppa as a	1.4. The international licence application is a separate regulatory process to that of the EIA. CWA is aware of both the process and requirements as set out in the international application guideline and will comply accordingly. As it relates matters of capacity, please refer to 1.1 and 1.1.1 above. 1.5. CWA response: CWA will address ACSA's comments in two parts: **Part 1: ACSA's comment on having sufficient capacity**

			justification for a second airport. ACSA has an approved Network Strategy, CTIA masterplan and CAPEX permission application process which forecasts growth and enables the development of the airport and additional capacity by 2050 to 23.6 million passengers per annum. The airport will thus have sufficient capacity to meet this forecasted demand. It is important to disclose and consider in the CWA EIA that Airports Company South Africa has an approved 5-year Permission, a 10-year Development Plan and a ultimate masterplan. The new ACSA airport charges (tariffs) were gazetted in government notice 2269 of 2nd January 2024, which was informed by the CAPEX Permission. The former Minister of Transport, Ms Sindisiwe Chikunga, also announced the commencement of the CTIA major capacity projects at a media briefing on the 5th of March 2024. These projects include the commencement of the New ReAligned Runway (NRR) and terminal expansion projects, as well as additional terminal buildings, air bridges, aircraft parking bays, and airfield circulation enhancements, amongst other investments. Key areas of the international terminal will also be upgraded to increase capacity. This therefore means that CTIA can accommodate forecasted passenger volumes of 23.6 million passengers per annum by 2050.	With reference to matters of capacity please refer to responses provided in 1.1 and 1.1.1. **Part 2: The ACSA long-term traffic forecasts and associated development plans are dynamic and flexible** The economic regulator grants a tariff to fund a particular ACSA-developed capex plan. The tariff decision is dynamic and accounts for changes in the capex plan over time. This means that the plans are not fixed due to market shifts and environmental factors. The plans are determined through the constructive engagement process with airlines and are dynamic. It changes over time as traffic demand, technology and other market drivers change. This includes the introduction of airport infrastructure outside of the ACSA network, such as the CWA development. The ACSA development plans or capex plans, are a function of market and industry inputs. The development plans are co-created together with the airlines and must be dynamic enough to respond to market changes. The permission period is 5 years for review every 3 years, allowing for traffic forecasts and development plans to be updated as required.
		1.6.	With regards to unmet market demand, e.g page 28 of 340 of the Comments & Responses Report Appendix 30 and various other statements on the market demand, it is not clear where the additional demand will emanate from. Due to the high upfront costs to start flights to a new destination or country, carriers are very careful to make sure that sufficient demand for new flights exists. As indicated above, no evidence exists of new markets which challenge the need for, and desirability of a second airport in the Cape Town Metro especially where CTIA will accommodate all forecasted scheduled domestic and international traffic. The NADP states that "An application for international status of an airport should be accompanied by a comprehensive feasibility study with specific emphasis on economic and financial viability and sustainability. In	1.6. As it relates matters of new markets and unmet demand, please refer to 1.1.2 above. The international licence application is a separate regulatory process to that of the EIA. CWA is aware of both the process and requirements as set out in the international application guideline and will comply accordingly. As it relates matters of capacity, please refer to 1.1 and 1.1.1 above.

			particular, an applicant should be able to demonstrate: The presence of significant unmet market demand for international air services and its ability to meet such demand"; therefore a key criteria is to meet unmet market demand. Airports Company South Africa confirms that we do not have capacity constraints and have approved projects to meet future demand.	
		1.7.	The CTIA ultimate masterplan includes the development of a second parallel runway and associated infrastructure. CTIA can thus ultimately develop to 45 mppa. Therefore, using capacity and demand as a reasoning to justify the need and desirability of the proposed CWA is factually incorrect. The EAP cannot ignore these projects and masterplans in determining the viability of CWA by stating that there is unmet demand. Page 28 and 29 of the Comments and Responses Report, Appendix 30, also states "CWA's industry consultation has shown that there is unmet demand". ACSA is not aware of this unmet market demand and it is important that the EAP demonstrates where this unmet demand is, because it is an important trigger and motivation criteria in this EIA.	1.7. Response from CWA: **Part 1: ACSA's ability to deliver capacity up to 45MPPA** ACSA puts forward CTIA's ability to deliver capacity as one of the main arguments as to why a second airport should not exist, when in fact this is but one consideration in a multitude of factors that should be considered when evaluating the need for a second airport. CWA notes ACSA's 5-year development plan. The basis for ACSA's argument is that CTIA can provide further capacity based solely on the fact that there is an airport master plan in place which indicates that the airport can grow up to 45MPPA. According to a publication by IATA *"Airport Master Plans: impact on capacity & efficiency, GANIS 2017 – Montreal, Canada…* • *An airport master plan is the airport's vision of how the ultimate development potential of the airport could be realised* • *It is a physical representation of an airport's long-term capital investment / business plan* • *It will provide an indication of how capacity enhancement may proceed over the short (0-10 year), medium (10-20 year) and long (20+ year) terms."* It is not fait accompli that CTIA will be able to develop the airport to this level of capacity. To reach the capacity of 45MMPA, CTIA will require a new second parallel runway (in addition to the new realigned runway), multiple terminal expansions, apron development, and so forth. None of these carry development rights

			or regulatory approvals at this stage. These development programmes will be subject to development planning and regulatory processes. The outcome of these development planning processes will then take broader considerations and impacts into account such as road access, bulk services, safety, noise, informal settlements, etc.
			
			It is CWA's understanding that some of these developments are reliant on the acquisition and consolidation of all vacant land to the east of the current airport envelope and to the west of Symphony Way. In and during these processes the relocation of a number of large informal settlements have to be done with the relevant authorities.
			
			It is therefore premature for ACSA to say that CTIA can grow to 45MPPA, when the required rights and regulatory approvals have not been obtained to substantiate such a statement.
			
			Part 2: Capacity is not the sole criterion for the assessment of a second airport
			
			Capacity is not the only consideration in assessing the need for a second airport. A complete view of CWA's value proposition will have to be considered. Delivering additional capacity into the airport network, is but one. As a second airport CWA will:
			
			• Contribute to the City of Cape Town being more resilient, by adding airport capacity and redundancy to the airport system in Cape Town and the region, so that it is not only reliant airport.
			• Enable increased route profitability for all airlines flying into CTIA due to:
			  • Reduced fuel reserves
			  • Reduced fuel consumption
			  • Increased payload (passenger or cargo)
			• Enable new market entrants due to increased route profitability, making Cape Town more competitive as a destination

			• Drive a greener economy
			  • Enabling the airline industry to achieve their Net Zero target
			  • Contributing to greener skies due to reduced carbon emission reductions
			• Enable economic development and improving social conditions during construction and for the lifespan of the airport's operation
			  • The expansion of CWA will require a workforce for all parts of the airport value chain, representing a massive recruitment opportunity, i.e. there will be large volumes of vacancies.
			
			As such CTIA's plans to deliver additional capacity is not a sufficiently compelling argument as to why CWA as a second airport should not exist.
			
			Part 3: CWA's market strategy
			CWA's market strategy is informed by research, data and extensive industry consultations. Amongst other factors, it delineates between regional-international and intercontinental scheduled services. As part of the strategy, unique opportunities have been identified. This is the basis on which CWA is willing to make a significant investment.
			
			CWA is mindful of disclosing the full detail of its market strategy, because this is privileged information but can confirm the following:
			
			• General Aviation Services
			• Diversion Services
			• Domestic Scheduled Services
			• Regional-International Scheduled Services
			  ○ CWA as an international airport will contribute towards the growth and retention of current regional-international markets which are currently underserved
			  ○ CWA as an international airport will attract new regional-international markets which are currently unserved
			• Intercontinental Scheduled Services

		1.8. Page 28 of 340: CWA incorrectly states that "as a designated airport (it) will generate its own traffic, facilitating domestic and international scheduled airline services and performing a complementary role to the existing Cape Town International Airport and the region by providing an injection of needed capacity (specifically during peak hours)". A major investment in a second commercial domestic and international airport, to attract scheduled domestic and international traffic, only becomes viable when additional capacity is required. It is therefore important that the EAP first recognizes and confirms that CTIA has sufficient capacity and will invest and grow as air traffic and passenger volumes increase. The EAP must recognize these facts and use this information when considering the "need and desirability" of CWA, and to address the question of why a second airport is required. Please see attached map of the CTIA site and the ultimate masterplan in Figure 1 below.	○ CWA as an international airport will contribute towards the growth and retention of current inter-continental markets which are currently underserved ○ CWA as an international airport will new inter-continental markets, which are currently unserved 1.8. CWA Response: "as a designated airport CWA will generate its own traffic, facilitating domestic and international scheduled airline services and performing a complementary role to the existing Cape Town International Airport and the region by providing an injection of needed capacity (specifically during peak hours)" The above statement is substantiated based on the following: • CWA concluded a comprehensive business strategy and plan which was informed by numerous market intelligence, stakeholder inputs, risk analysis and mitigation plans and included amongst plans, a detailed financial plan. • As an outcome of the business strategy, a full market strategy was developed. • In accordance with the business plan, the economic and financial feasibility and viability for CWA indicates that the Cape Winelands Airport is economically viable and financially feasible and demonstrates long-term sustainability. • In addition, the airport would contribute to and significantly enhance environmental sustainability. As it relates matters of capacity, please refer to 1.1 and 1.1.1 above. **Role of Cape Winelands Airport** The aviation sector is broad and complex, with multiple unique and heterogenous sub-sectors. It is globally accepted that multiple airport operators can serve different and overlapping roles. **Complementary role as General Aviation Hub** General aviation is key market and integral part of CWA's business strategy.

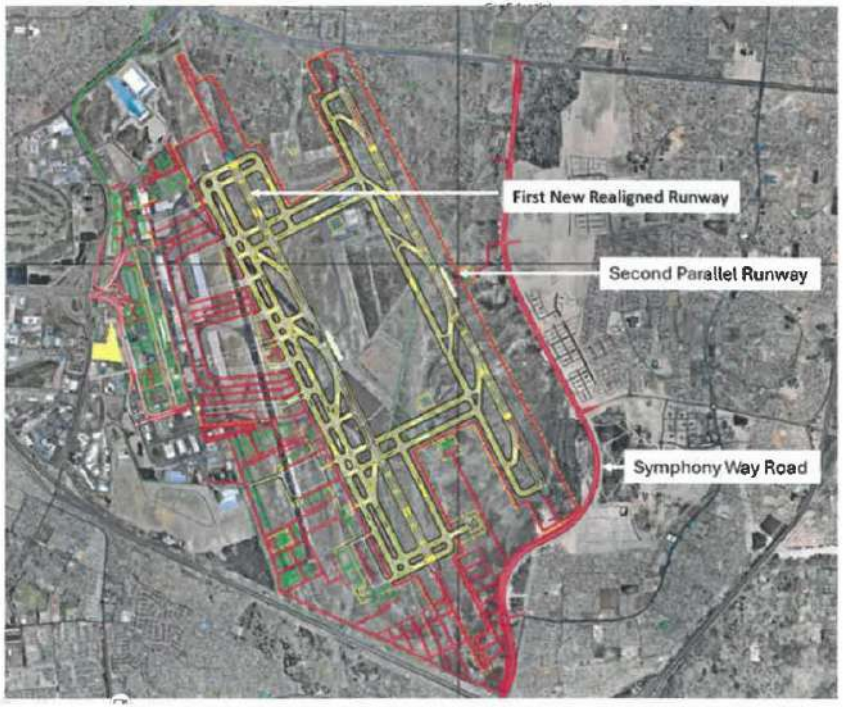


Figure 1: CTIA masterplan highlighting the two new runways and Symphony Way

There are other airfields within 30km of CWA, however each are already at or near their maximum hangar capacity, with short runways suitable for only a small portion of the sector and face significant barriers to expansion due to various factors (location, size, zoning, availability of land). The expansion of CWA will provide much needed relief.

CWA will therefore be the only airport in the region other than CTIA with the infrastructure capable of serving the broader General Aviation (GA) sector – a sub-sector that is currently faced with significant capacity shortages rendering the industry unable to serve the ever-increasing demand. With CWA, the GA sub-sector can finally consolidate at one airport in an environment conducive to growth, stimulating further economic activity.

In addition to an independent GA traffic forecast that was conducted for CWA, CWA held extensive engagements with GA operators from across the country to gauge the interest and support from industry. It was concluded that there is an overwhelming shortage of GA capacity and facilities within Cape Town across the GA sector. CWA's plans have therefore been informed by industry and are a direct response to demonstrated demand.

The CWA will play a major role in consolidating general aviation in the region.

Complementary role as Diversion Airport

The decision to apply for an ICAO Code 4F instrument operations and ICAO Category 9 fire and rescue level of protection with a 3.5km runway follow extensive industry consultations with airlines and airline associations. This level of infrastructure and services are required by the airline operators in order to use Cape Winelands Airport as an alternative destination airport in the event of diversions. From the specialist studies it is clear that such capability and capacity will reduce operating costs by up to 5% per flight for current services operating into Cape Town International Airport. The savings in cost is as a direct result of a reduction in fuel uplift and fuel burn, the latter then having a further positive impact by reducing carbon emissions up to 5% per flight.

Globally, the airline industry is challenged to achieve Net Zero by 2050. The existence of Cape Winelands Airport will enable a 5% reduction in carbon

			emissions for every flight flying into CTIA. It will allow Cape Town to be ahead of the curve in being an attractive destination for those users that do not only value lower costs but also environmental considerations – an increasing trend amongst global travellers. Through this CWA will also align to the aspirations as set out in the National Airport Development Plan (NADP). Projected indications are that the cumulative savings or value being retained on an annual basis exceeds R1 billion per annum when considered and calculated across all of the airlines. The specialist studies completed confirm that the further development and expansion of the Cape Winelands Airport will significantly contribute in providing real relief for the airline operators in terms of costs and route profitability. Airline margins are very low, 2-5%, a 5% reduction in the operating costs of a route therefore will make a meaningful impact, not only in retaining current airlines but also in attracting airlines where the business case have been marginal to date. The savings have been verified as real and significant and will be a key contributing factor in ensuring growing and sustainable air access into the region, much needed to mirror the growing population and economic activity in Cape Town and the Western Cape. These benefits accrue with airlines continuing to fly into Cape Town International Airport, i.e. as a diversion airport, CWA does not take away any of Cape Town International Airport's traffic. Another key benefit associated with CWA as a diversion airport accrues to the passenger, with the CWA as the diversion airport being located in the same city as the destination airport (CTIA), i.e. currently when aircraft are diverted from CTIA, passengers find themselves in a different city. With the existence of CWA as a diversion airport, passengers will have the immense of diverting to an airport in the same city only 25km away from their intended destination. **Scheduled Services** Considering the major capital expansion project that CWA is embarking on, which includes a 3.5km Code F runway, the gradual traffic growth may seem misplaced. However, the primary reason for CWA implementing such

			infrastructure is not just about scheduled passenger growth at its own airport – it is to specifically unlock the benefits enabled to the airline sector by introducing a much closer alternate airport for the purposes of diversions and fuel planning on flights inbound to CTIA from day one of the airport opening – as the same level of runway capability as CTIA is required in order to do so. The infrastructure described above, comes into being through an innovative and fresh way of creating world class infrastructure in a manner that also has minimum impact on the airlines and passengers from a tariff and cost perspective. This same infrastructure can and will be used to build scheduled services over time in and out of Cape Winelands Airport. The approach towards Cape Winelands Airport's (CWA) introduction into the market is one of measured conservatism with CWA expected to process 5 million passengers per annum over 25 years. CWA is expected to have 25% market share (5 million of 20 million). This equates to CWA's own incremental growth of market share of a very gradual 1% per annum. CWA's conservative and measured approach to traffic development over the 25 years, will enable both CWA, CTIA and other airports to adjust their business plans in keeping with market shifts and growth by positively contributing to CTIA's and CWA's sustainability. **Complementary role as a Reliever Airport** CWA, as a reliever airport will perform multiple functions, from relieving congestion at CTIA during times of temporary increased activity or providing redundancy to the City of Cape Town in times when the airport is closed for an extended period of time. As a reliever airport: • CWA will improve the attractiveness of the city to host major events by providing additional airport capacity. When the city bids for a mega event, air access is always a key consideration and with added airport capacity it could be the difference between being the winning bidding city or not.

			• CWA will contribute toward continuity of economic activity (trade and tourism) in the event of an extended closure at CTIA. • CWA could provide additional temporary or permanent capacity during peak periods (slot constraint times and peak seasons noting the seasonal nature of visitor trends) • CWA will offer redundancy in the event of catastrophic fires, structural failures, fuel or power supply interruptions etc, etc Add to that the benefits of having a second airport, as is the case with most major prospering cities, ensuring full redundancy in the event of a failure of infrastructure, services or systems at any one of the airports. Regular failures have been experienced at CTIA in recent times ranging from fuel supply, availability of runway and power failures. On each occasion the impact on both the airlines and passengers are significant, this in terms of disruption, costs and inconvenience. It is clear that the relationship between CTIA and CWA is complementary in that as a first step CWA allows to grow the market substantially and on a sustainable basis. The two main airports CTIA and CWA can in terms of their respective master plans, co-exist and integrate with smaller surrounding airfields, the consolidated picture essentially representing the Cape Town and Western Cape integrated Air Access Master Plan. **Competition** ACSA has since its establishment had the benefit of operating CTIA for 30 years without competition. CWA's position is that competition in a free-market economy is critically important, this includes competing fairly with competitors, customers and suppliers, alike. Competition benefits both businesses and consumers. It shows companies where they need to improve; encourage organisations to strive for greater

			efficiency, become more innovative, more productive, and be better businesses, in other words ultimately satisfying unmet demand. It is CWA's view that the proposed investment into CWA should be welcomed as it helps to grow the SA airport network and sector as a whole, while contributing toward a sustainable city. Response by EAP: The comment is noted. The EAP also notes the masterplan on which the CTIA capacity and growth statement is based. In Terms of NEMA the development rights are not in place for the full scope of the masterplan, therefor it does not form part of the scope of assessment.
		1.9. The Scoping Report argues that the airport will be built with private funds and will therefore not be a cost to the taxpayer or public. While the airport itself may be funded privately, the airport needs a wide range of services from government to function. These government services like SARS (including Customs), Border Management Authority (BMA) (including Department of Home Affairs, Port Health, Agriculture, Environment), SAPS, and bulk infrastructure requirements like roads, water, electricity, sewer to support a second commercial international airport, will be funded by the taxpayer and it is therefore important to consider whether the investment in a new international airport is required and whether the state can adequately resource this new airport.	1.9. CWA Response: The CWA expansion will not be a burden on the state or the taxpayer. On the contrary, CWA will contribute to the fiscus during construction and ongoing operations as various taxes and levies will become payable or accrue to the National Government and the City of Cape Town. The fiscus will benefit from individual and company taxes, individual taxes and levies, VAT and import duties. The airport expansion will make a significant financial contribution to the City of Cape Town and South African fiscus through: • Increase in gross geographic product (GGP) • Increase in household income • Rates and services to the City of Cape Town • Employment Opportunities • New Business Sales In addition, it is CWA's intention that government services be procured on a cost recovery basis so that the taxpayer is not impacted.

			As it relates to infrastructure requirements, CWA plans to be predominantly self-sufficient and off the grid to limit the reliance on City resources.
		2. A diversion airport: 2.1. Section 5.2 of the Draft Scoping Report argues that it is necessary to build a second airport for diversions and considers the status of CWA as an alternative diversion airport and the associated environmental savings. We raised comments on this on page 29 and 30 of the Comments and Responses report, Appendix 30, under Section 3.5: "In terms of diversions, international airlines designate optimal airports on route and ACSA has four airports within its network that can easily accommodate wide body diversions into CTIA, these being OR TIA, KSIA, BFIA and UIA. The coastal airports of George and CDSIA also serve as domestic diversion airports". The EAP's response to this was the following: "ACSA does not consider diversion distance(s) in their list of diversion criteria. Distance to an alternate airport for a diversion is a direct determinant of the quantum of reserve fuel to be carried on board each flight. Changing the declared alternative airport from ORTIA/FA OR to CWA/FA WN (for example) results in a substantial reduction in possible diversions distance, from 1271km to 25km". Our response to this is as follows: The EAP recognizes in their report "App-28-CWA-Diversion-Airport-Analysis Excerpt-3.pdf' that airlines select different diversion airports as an alternate diversion airport and that domestic airlines select other domestic airports like CDSIA airport in Gqeberha as an alternate diversion airport to CTIA. In terms of diversions, international airlines designate optimal airports on route and ACSA has four airports within its network that can easily accommodate wide body diversions into CTIA, these being OR Tambo International Airport (ORTIA), King Shaka Intemational Airport (KSIA), Braam Fischer International Airport (BFIA) and Upington International Airport (UIA). The coastal airports of	2. 2.1. CWA response: **Part 1: Current diversion airports within the ACSA network** <u>Diversion airports for wide body operations:</u> ACSA states that "it has four airports within its network that can easily accommodate wide body diversions into CTIA, these being OR Tambo International Airport (ORTIA), King Shaka International Airport (KSIA), Braam Fischer International Airport (BFIA) and Upington International Airport (UIA)." Airlines perform their own technical and commercial assessment around which alternates are viable and preferred, which includes factors such as: • Runway & taxiway length, width and strength • Aerodrome operational hours • Ground-handling capability and handling agreements • Navigational aids • Weather • Apron parking space • Crew duty time limits • Cost and availability of accommodation for pax & crew Considering the above factors, ORTIA is in fact the preferred alternate for flights destined for CTIA even though it is not the closest, and therefore it is not an "over-exaggeration" to use ORTIA as the baseline for diversion distance. A recent example of this was the incident on 29 July 2024 whereby the loss of power to the runway lights at CTIA caused several domestic and international flights to divert to ORTIA. During this incident and per ACSA's own announcements at the time, every

		George Airport (GRG), Chief Dawid Stuurman International Airport (CDSIA) and King Phalo Airport (KPA) also serve as domestic diversion airports. The ACSA masterplan makes provision for the upgrade of domestic coastal airports to ICAO Code 4E airports, which will be able to accommodate international widebody flights. GRG and CDSIA will be upgraded by 2030 and KPA will be upgraded by 2040. However, in their response to our comments, CWA assumes that airlines use ORTIA as alternate airport (a worst-case scenario) and makes reference to a distance of 1271 km (CTIA to ORTIA) vs 25km (CTIA to CWA). As mentioned in ACSA's previous response, airlines select different airports for diversions. The distance from CTIA to GRG is 349km, the distance from CTIA to CDSIA is 659km and CT IA to UIA is 667km. The example of using the distance from CTIA to ORTIA (1271 km), is therefore an over exaggeration of the diversion distance, and potential fuel savings. The "alternative airport and environmental savings" study needs to consider the existing possible diversion airports to determine a more realistic environmental savings. It is also important to note that diversions to alternate airports are also mostly temporary and that passengers do not disembark from the aircraft before the aircraft continues on its journey to the original destination airport, in line with the Foreign Operators Permit.	single wide-body aircraft diverted to ORTIA only, which is contradictory to ACSA's comment that using ORTIA as the baseline for assessment in Appendix 28 is an "over exaggeration". <u>Diversion airports for domestic operations:</u> ACSA states that "the coastal airports of George and CDSIA also serve as domestic diversion airports." For domestic diversions, as per Appendix 28, CWA has in fact used CDSIA as the baseline diversion alternate, as recommended by ACSA. As it relates to both international and domestic diversions, CWA has also corroborated the above with domestic and international airline carriers, and therefore for reasons mentioned above, the study performed on fuel, payload and environmental savings is based on data and consultations and is indeed realistic. **Part 2: ACSA's future plans to upgrade the domestic coastal airports to accommodate international widebody flights for diversions** ACSA states that "The ACSA masterplan makes provision for the upgrade of domestic coastal airports to ICAO Code 4F airports, which will be able to accommodate international widebody flights. GRG and CDSIA will be upgraded by 2030 and KPA will be upgraded by 2040." In this instance the expansion of the CWA subject to regulatory approvals will come onstream before 2030 and 2040 respectively and deliver a closer alternate airport for CTIA, only 25 km away. This will result in a significantly closer diversion alternate, which leads to less diversion fuel being required and therefore less weight carried; resulting in the fuel, payload and environmental savings. Given this, the introduction of CWA as the diversion airport, allows ACSA to reposition their initial plans of upgrading the coastal airports to ICAO Code 4E. ACSA can instead more efficiently allocate capital to

			other business priorities in their coastal airports or across their network of airports. . The solution results in a win-win scenario for all roleplayers: ACSA, the airlines, the passengers and CWA. Knowing the above, and should ACSA decide to still proceed with the upgrades for the coastal airports, even with CWA in existence, it does not change the fact that these airports are a substantial distance away from CTIA compared to the proposed CWA (25km) and thus environmental, fuel and payload savings enabled by CWA would still apply. It would offer the passengers a far less favourable solution as they will land in a different city as opposed to landing the city of their destination.
		3. Security of JETAI fuel supply: We included the following comment in the first scoping report: "CWA must also indicate what or where alternative supplies of JET Al fuel will be sourced from, noting that if CWA is dependent on current existing sources of fuel, it may exacerbate current fuel supply and storage issues in the region. The EAP then provided the following response: "Fuel supply, including the supply of Jet A-I fuel will be secured through supply agreements, which naturally include confidentiality clauses, standard to Aviation industry practices. With CWA expanding the market and providing its own storage, the buying power of Cape Town as a region will improve which will actually alleviate fuel supply and storage issues in the region, not exacerbate issues". We disagree with this response to our comment and respond as follows: CTIA receives a daily supply of JETAI fuel to meet the demand for JETAI. The bulk of the fuel supplied to CTIA comes from a single refinery in Cape Town. CTIA has experienced challenges with the continuity of	3. Response by CWA: **Addressing Supply Chain Concerns** We understand that CTIA currently faces challenges with the continuity of Jet A-1 fuel supply, given its reliance on a single refinery in Cape Town. CWA has thoroughly considered these factors and is committed to ensuring that our operations do not exacerbate existing supply chain issues. **Alternative Supply Sources:** CWA is actively exploring and securing multiple supply agreements with various suppliers, both locally and internationally. These agreements are intended to diversify our fuel sources, thereby reducing the dependency on any single refinery or supply chain. This diversification strategy is central to our plan to enhance the overall resilience of the regional fuel supply network and to open up new supply chain opportunities which will enhance competition in the region. **Storage Capacity and Buffer Stock:** The storage facilities at CWA are being designed not only to meet our operational needs but ultimately also to contribute to the region's overall fuel

			JETAI supply and the production of JETAI supply from the refinery, which is sometimes insufficient to meet all the demands of CTIA, especially during peak periods. A secondary airport with a significant demand for JETAI will split the supply chain, add complexity and place additional JETAI supply demands and logistic requirements on the refinery and fuel suppliers, which will negatively impact the supply and storage priority currently in place for CTIA. The storage of JETAI mainly serves to create a buffer stock to be used in the event of production or logistic disruptions. The CWA EIA should therefore demonstrate how the overall risks associated with security of fuel supply will be addressed, so as not to further exacerbate the current supply challenges.	storage capacity. By increasing the storage infrastructure, we aim to create additional buffer stock that can be utilized in case of any disruptions in the supply chain, potentially even alleviating pressure on CTIA during peak demand periods. **Supply Chain Management:** We are aware of the complexities involved in splitting the supply chain between two significant airports. To mitigate this, we are implementing advanced supply chain management strategies to ensure that fuel demand is met efficiently without placing undue strain on the current single refinery in Cape Town and logistics operations **Transportation of Fuel:** CWA is well positioned to, over the medium to long term, have all bulk aviation fuel moved via the existing and adjacent active rail line running into both the ports of Cape Town and Saldanha Bay. This will avoid CWA having to, as in the case of CTIA, having to truck fuel via public roads. **Collaborative Approach:** CWA is committed to working with CTIA, ACSA, and other stakeholders to align our fuel supply strategies as far as possible, within the ambit of the law. We believe that through collaboration, we can enhance the region's fuel security and address any potential challenges proactively to the benefit of all roleplayers. To conclude, CWA remains dedicated to ensuring our development enhances the region's aviation infrastructure without compromising existing operations, and we are confident that it will demonstrate our commitment to not only securing CWA's fuel needs but also contributing positively to the region's overall fuel supply stability, growing supply capability and increasing aviation fuel supply chain competitiveness.

		4. Regulatory Approvals Process: 4.1. Cape Winelands Airport (CWA) is proposing to upgrade from a General Aviation Category 1 airfield to an airport with scheduled and unscheduled commercial domestic and international operations, with airport infrastructure for ICAO Code 4E instrument operations and ICAO Category 9 fire and rescue level of protection. This is a significant transformation of the air transport sector, not only in Cape Town, but also to South African airspace in general, and requires careful consideration. It is often stated in marketing and media releases that CWA proposes to be the Lanseria of Cape Town which is 25 km apart from CWA. As with many large cities worldwide with multiple airports, the location of Lanseria Airport in the West in relation to OR Tambo International Airport (ORT IA) in the East with a separation distance of 59.5 km, was meticulously planned and supported by approved planning frameworks; with operating procedures in place by the regulator to ensure careful airspace management and safety. 4.2. True competition amongst airports within the same City is a misnomer. Despite JFK operating alongside Newark, or Heathrow operating alongside Gatwick, Stansted and London City, it is still the civil aviation regulator who issues licenses to operate and rationalizes the traffic on the airport operations and designates specific airports for specific types of traffic (such as domestic, regional or long haul), be they government owned or private, to ensure overall sustainability and viability of both airspace and airport capacity. In most Cities in the world, there is one major international hub airport and smaller secondary airports to accommodate required demand and located to serve a particular clearly differentiated market.	4. CWA Response: 4.1. A supplementary study and simulation were initiated in response to the EIA comments and will be included in the impact assessment phase of the EIA. The purpose of the study is to further validate and reaffirm that: • FAWN and FACT can operate independently and safely with, considering both CTIA runways, 01/19 and its new realigned runway (NRR) runway configuration (s). • FACT arrival and departure tracks over FAWN will have sufficient distance to permit independent operations between the two airports. • Aircraft arriving and departing FACT permit sufficient vertical separation for aircraft to depart and arrive FAWN. Arriving and departing aircraft for the respective airfields can be separated laterally and vertically well within accepted industry norms and standards. • FAWN's compatibility with FACT, emphasising its strategic importance rooted in alignment with GANP and NAMP. 4.2. CWA Response: It is not clear what ACSA means with *"true competition"*. The aviation sector is broad and complex, with multiple unique and heterogenous sub-sectors. It is globally accepted that multiple airport operators can serve different and overlapping roles. Please refer to 1.8, where CWA's role is clearly articulated. ACSA should welcome the proposed investment into CWA as it helps to grow the SA airport network and sector as a whole, while de-risking ACSA's business through private sector investment. The regulatory framework as outlined in the Airports Company Act 1993, protects ACSA by granting a commercial return on assets and

			thus, as long as no unnecessary investments in infrastructure are made, the airports will always be sustainable. This is true for all airports in the ACSA network, including Cape Town International Airport and George Airport. Competition in a free-market economy is critically important, this includes competing fairly with competitors, customers and suppliers, alike. SA competition laws prohibit agreements or behaviour that damages competition or companies abusing dominant market positions. Competition benefits both businesses and consumers. It shows companies where they need to improve; encourage organisations to strive for greater efficiency, become more innovative, more productive, and be better businesses, in other words ultimately satisfying unmet demand. As it relates matters of CWA's market strategy, please refer to 1.1.2 above.
		4.3. We understand that an Environmental Impact Assessment (EIA) is but one of a series of regulatory hurdles as highlighted in the NADP. The regulators may impose operating restrictions on CWA, such as handling international / regional / scheduled carriers, operating curfews and airspace capacity constraints. These restrictions could change the need and desirability of CWA, and should be considered as risks, the magnitude of which should be assessed via the EIA process. The business case and EIA assumes that the CWA will attain international license status. As an example, the socioeconomic benefits and financial viability of an international airport with unrestrained capacity will display a very different risk / benefit profile to an airport that is restricted to handling general aviation only. The EAP should formally consider the implications of CWA not receiving an international license in the scoping report. This will change the scope and viability of the project, and the projected impact outcomes.	4.3. Response by EAP: At this junction no restrictions have been imposed, therefore the EIA is assessing the scope as per the applicant's intent. All EIAs assess the business case as per current status quo. No restrictions have been imposed therefore it's not applicable at this point of the EIA. The NEMA EIA process stands separate to the International Licence Application, therefore the EIA needs to deal with the assessment of the "worst case" scenario being the full scheme. The EIA deals with the current scope and to date there are no indication that operating restrictions will be imposed.

		4.4. It is important to note that since the commencement of this EIA, the proposed upgrading of CWA to a scheduled commercial domestic and international airport has never been considered in government policy, the National Aviation Development Plan (NADP) and the City of Cape Town Metropolitan Spatial Development Framework (MSDF). A second or secondary city airport in the greater Cape Town area has also not been formally considered in policy or strategy, since it has long been established that Cape Town International Airport (CTIA) has capacity to expand and meet demand for the foreseeable future.	4.4. CWA Response: It is factually incorrect to state that the CWA proposed upgrading has never been considered in government policy or the National Airport Development Plan (NADP) as a specific development would never be included in policy. A development can however be aligned to policy and CWA is strongly aligned to government policy and the NADP. In terms of infrastructure development, the White Paper on National Civil Aviation Policy (2017), recognises the importance of modernising and expanding airport infrastructure. It emphasises the need for well-maintained airports to accommodate growing air traffic demand. The policy recognises the environmental impact of airports and encourages sustainable practices, noise reduction, and eco-friendly airport designs. CWA is strongly aligned to the vision of the South African airport network as set in the NADP. "The vision for a South African airport network includes that it… • Has sufficient capacity to handle air traffic, passenger, and freight volumes • Is integrated into the strategic transport network, spatial development and land use planning • Is able to balance and meet the needs of airport users • Is financially sustainable • Complies with safety, security and environmental regulation, including noise and emissions • Optimises contribution to socio-economic development and meeting government's wider objectives, both directly and indirectly through airport precinct development, and thereby helps to position South Africa competitively both on the continent and globally • Is responsive to changing technologies" The NADP also identifies critical gaps, which through the expansion of CWA will be addressed.

			The City of Cape Town Metropolitan Spatial Development Framework (MSDF) is created in terms of the Municipal Planning By-law (MPBL). Section 99 of the MPBL puts it in context "*the proposed use or development of land must comply with or be consistent with the municipal spatial development framework, or if not, a deviation from the municipal spatial development framework must be permissible."* The MSDF is a policy document providing guidelines as stipulated in the MPBL. Policies are not laws. Policies provide general guidelines, not rules that must be followed and may not be departed from. While it is generally the case that development proposal must adhere to policy norms, it is entirely permissible for those norms to be departed from provided that the departure is reasonable and justified by context-specific considerations. Ultimately, the City's duty is to evaluate a development proposal on its own terms and assess its compliance with the requirements set out in Section 99 of the MPBL. To that end, the City cannot fetter its discretion by blindly or rigidly applying policies without due regard for the exigencies of a particular situation. It is not possible for long-term spatial strategies to anticipate all initiatives by the private sector in all sectors in a free and competitive marketplace, as opposed to a State-controlled economy which is not market-driven. At best it can provide principles, goals and targets in broad terms. The City of Cape Town in its comments dated 23 August 2024 stated correctly that "*1.21.3 The MSDF focuses on matters relating to land use and the long- term spatial planning and does not include operational details associated with the operations of both airports and in particular, the proposed CWA to cater for scheduled commercial aircraft operations. This is outside of the MSDF policy guidance because it is effectively outside the mandate of the City to stipulate the appropriateness of such land uses …"* Thus, ACSA's expectations of the content and the status of the MSDF is misplaced.

			Alignment with all levels of spatial planning from National to District will be addressed in the process going forward.
		4.5. In our comments submitted in December 2023, we stated that Cabinet decided in 1998 to rationalize the Ports of Entry. This decision restricted the number of international airports to ten. The response to this by the EAP was that this decision was made more than two decades ago, and that the decision is outdated and needs to be revised. While this decision was taken more than two decades ago, it does not retract from the fact that it remains current policy, is legally binding and valid. In addition, according to the NADP, applications for an international airport must be submitted to the Cabinet for consideration.	4.5. This comment is noted by the EAP. Furthermore, the international license application is a separate regulatory process, one which CWA will follow when it triggers its international license application.
		4.6. ACSA is in full support of additional independent commercial airports operating in addition to ACSA airports. South Africa has more than 100 licensed aerodromes. We appreciate and support how the introduction of additional airports into the network can result in market efficiencies, improved customer satisfaction and services, and lower prices. However, this support extends only where this makes practical and economic sense, underpinned by the need for additional capacity informed by traffic forecasts that trigger new airport developments, and are backed by sound planning principles and an airport development framework that unfolds to support traffic forecasts and capacity demand.	4.6. CWA response: **Sustainability of ACSA airports** As long as ACSA, as a fellow developer and operator of airports, optimises its funding model by investing in assets that are needed (from its own specific demand) it can never be unsustainable. Based on the regulatory model and in keeping with the regulatory framework as outlined in the Airports Company Act 1993, which protects ACSA by granting a commercial return on assets and thus, as long as no unnecessary investments in infrastructure are made, the airports will always be sustainable. This is true for all airports in the ACSA network, including Cape Town International Airport and George Airport. **CWA's Sustainability** • CWA concluded a comprehensive business strategy and plan which was informed by numerous market intelligence, stakeholder inputs, risk analysis and mitigation plans and included amongst plans, a detailed financial plan.

			• As an outcome of the business strategy, a full market strategy was developed.
			• In accordance with the business plan, the economic and financial feasibility and viability for CWA indicates that the Cape Winelands Airport is economically viable and financially feasible and demonstrates long-term sustainability.
			• In addition, the airport would contribute to and significantly enhance environmental sustainability.
			CWA's value proposition extends beyond delivering additional capacity into the airport network
			Capacity is not the only consideration in assessing the need for a second airport. A complete view of CWA's value proposition will have to be considered. Delivering additional capacity into the airport network, is but one. As a second airport CWA will enable the following market efficiencies, improved customer satisfaction and services, and lower prices:
			• Contribute to the City of Cape Town being more resilient, by adding airport capacity and redundancy to the airport system in Cape Town and the region, so that it is not only reliant airport.
			• Enable increased route profitability for all airlines flying into CTIA due to:
			  • Reduced fuel reserves
			  • Reduced fuel consumption
			  • Increased payload (passenger or cargo)
			• Enable new market entrants due to increased route profitability, making Cape Town more competitive as a destination
			• Drive a greener economy
			  • Enabling the airline industry to achieve their Net Zero target
			  • Contributing to greener skies due to reduced carbon emission reductions

			• Enable economic development and improving social conditions during construction and for the lifespan of the airport's operation • The expansion of CWA will require a workforce for all parts of the airport value chain, representing a massive recruitment opportunity, i.e. there will be large volumes of vacancies. As such CWA believes that it has demonstrated that the introduction of CWA into the network will result in market efficiencies, improved customer satisfaction and services, and lower prices. It makes practical and economic sense and it has been demonstrated that both CTIA and CWA can co-exist and remain sustainable. CWA affirms its commitment to collaborating with ACSA and to working with ACSA and all industry roleplayers for the benefit of the flourishing aviation industry in South Africa. Please refer 1.8, which clearly articulates CWA's role.
		5. CTIA's New Realigned Runway: The EAP scoping reports persists in stating that the New Re-aligned Runway (NRR) at CTIA is still under consideration. This project was initially put on hold due to the reduced ATM and passenger volumes, and the uncertainty and reduced sustainability of the aviation industry because of the COVID19 pandemic. This was reasonable to ensure that we do not invest in a costly asset that it not required by industry, because it will result in higher tariffs. Airports invest in capacity at the right time to meet future demand to maximize returns on assets that benefit the industry. We have previously stated that we will recommence with these projects as soon as the traffic volumes return. As stated earlier, ACSA has received approval for the CTIA major projects and already has a positive Environmental Authorisation for the New Realigned Runway and is starting the detailed design process. Air Traffic Navigation Services (ATNS) has been formally engaged to recommence airspace design work. Construction is planned to commence by 2026 and	5. CWA response: A supplementary study and simulation were initiated in response to the EIA comments and will be included in the impact assessment phase of the EIA. The purpose of the study is to further validate and reaffirm that: • FAWN and FACT can operate independently and safely with, considering both CTIA runways, 01/19 and its new realigned runway (NRR) runway configuration (s). • FACT arrival and departure tracks over FAWN will have sufficient distance to permit independent operations between the two airports. • Aircraft arriving and departing FACT permit sufficient vertical separation for aircraft to depart and arrive FAWN. Arriving and departing aircraft for the respective airfields can be separated laterally and vertically well within accepted industry norms and standards.

		the realigned runway is expected to be operational by 2028/9. This project is proceeding and is NOT simply still under consideration as interpreted by CWA. In light of the above, it is imperative that any airspace design planned by CWA incorporates this NRR project and associated flight paths, noise contours and glide slopes already considered in the approved NRR EIA. The CWA EIA specialist studies erroneously considers the current "old" runway orientation in its detailed analysis and not the New Re-aligned Runway at CTIA. This is fundamentally flawed. CWA has submitted a preliminary study that says that airspace will remain independent and that there will be no impact on CTIA's operations and capacity due to CWA's operations. However, until detailed design work is completed, we cannot confirm that there will not be an impact on CTIA. We remain concerned that the work undertaken by CWA does not fully consider the NRR nor does it consider the second parallel runway, and that it does not formally conclude that there will be no impact on the flight paths serving CTIA.	• FAWN's compatibility with FACT, emphasising its strategic importance rooted in alignment with GANP and NAMP. The NACO CONOPS report, that was developed for the environmental impact assessment (EIA) demonstrates how the FAWN procedures could be adapted to merge with FACT traffic routes in the short term. The concept IFP designs are feasible and demonstrate the capability of PANS-OPS design criteria to achieve solutions to complex airspace designs. ATNS contributed to the development of the CONOPS, as the designated ANSP, they have not identified any airspace constraints to capacity with both airports in operations. As capacity demands on airspace grow, the route structure can be adapted to separate the routes laterally. The adoption of vertical and lateral separation can be developed within the capability of the PBN requirements post 2030 and as described with respect to the ICAO Global Air Navigation Plan (GANP) and the South African National Airspace Master Plan. Examples of near-airport environments in high-capacity airspace provide sufficient evidence that the close proximity of FAWN to FACT should not impact the current and future aspirations of both airports. CWA believes that it has the potential to be pivotal to South Africa's aviation landscape, setting new standards for excellence with unprecedented scalability.
		6. CTIA's Second Parallel Runway: As stated in our initial comments in December 2023, CTIA's Master Plan includes a second runway. (Refer to Figure 1 above). This Master Plan has been approved by the Department of Transport. On page 36 of 340 of the Comments & Responses Report, it states that "CWA will not be considering	6. Response from EAP: The quoted statement is a response from the EAP, the sentence structure should have been “CWA EIA will not consider…”. The EAP is independent, we understand that the second parallel runway requires Environmental Authorisation first, therefore in terms of NEMA no development rights are in place. The CTIA second parallel runway is only an intent, it is not a given or a fix and

		the second parallel runway when impacts are assessed as part of the EIA process" on the basis that it has "no development rights". This statement is a concern because the EAP must independently consider all inputs. The decision on which potential impacts to consider and which to ignore rests with the independent EAP and Competent Authority, and not CWA. The second parallel runway must be considered for the following reasons: 6.1. It is a well-known fact that CTIA has had a second runway in its long term planning for the CTIA precinct for more than 25 years; this has been shared with both the City of Cape Town Municipality and Western Cape Government over the past decades. The position and layout of Symphony Way Road on the east of the airport is testament to this fact, as it's unusual alignment wraps around the southern end of the second runway (See Figure 1 above: CTIA masterplan highlighting the two new runways and Symphony Way). 6.2. Also note that the second runway position was disclosed in the EIA for the New Realigned Runway. The position and orientation of the first NRR was carefully considered because of the future second parallel runway. The second parallel runway was therefore part of the public and stakeholder consultation process, even though there was no requirement to trigger an EIA process because it is only required in future. 6.3. The Western Cape Government and the City of Cape Town do not make provisions for securing development rights of projects earmarked for long term development. EIA rights are also limited to no more than 10 years at most. Securing of development rights for long term future projects is not feasible. Regardless of whether formal development rights exist or not, the independent EAP must consider the impact of CWA on the future development of CTIA as a primary current approved airport. It does not make sense to continue with an EIA for a new development without formally considering the future development of a current approved international airport. It does not make sense to ignore the future CTIA development plans, approve the CWA airport and then in future realise that it compromises the full development of the current airport. This full	it is subject to long timeframes, restrictions and change that could result in many variables. However, the impact of the CWA application on airspace that include the CTIA, does form part of the EIA process and the specialist brief is guided by the NEMA protocols. We further understand that CWA is engaging with ACSA to resolve this matter. The second parallel runway is not approved, the EIA will deal with existing rights. This is only an intent that could potentially realise only in 25 years from now, challenges of land occupation, accessibility and unrest could influence the feasibility of the intent to develop a second parallel runway. The CWA does not “ignore” the intent, however as explained the intent does not reserve rights. The airspace specialist will consider all realistic airspace aspects in line with the required NEMA protocols.

		ultimate masterplan of CTIA must be recognized and a detailed analysis and study must be conducted on the impact of CWA. The EAP must include this second runway in the CWA EIA, most importantly in the socio-economic and airspace design reports of the EIA.	
		7. ACSA's Revenue Model: With regards to ACSA revenue, page 32 of 340 of the Comments & Responses Report Appendix 30: The EAP responds to say in bullet 6 that "traffic groMh is not a contributing factor to ACSA's airports' sustainability" and that "the economic regulator ignores traffic volumes", and that "as long as ACSA continues to invest in assets that are needed... it can never be unsustainable." This is incorrect because traffic volumes always impact on sustainability. Whilst it is generally true under the current revenue model that lower traffic volumes can lead to higher tariffs, this is inevitably passed on to the airlines. This then reduces their profitability and growth prospects. As a regulated airport operator, ACSA is required to operate sustainable airports by ensuring that sufficient ATM and passenger volumes are maintained and increased for the regulated asset base that either exists or is planned. This will ensure that airlines and airports can operate efficiently and sustainably for the benefit of the public. Since the New Realigned Runway and other major capex projects have regulatory approval, we are now investing in future capacity to accommodate future ATM and passenger volumes. We have forecasted ATM and passenger volumes and started an investment programme which does not consider the impact of CWA. The EAP must consider the potential loss of ATM and Passenger growth at CTIA because of the CWA development and proposed future developments and investments. The EAP also needs to consider the dilution of an existing and future asset base at CTIA, and the associated implications of higher tariffs or costs for the industry operating into CTIA. This is important, because the arguments about the financial benefits of CWA will be negated by the dilution of the efficient use of current and future assets at CTIA.	7. CWA response: The statement “"traffic growth is not a contributing factor to ACSA's airports' sustainability" and that "the economic regulator ignores traffic volumes", and that "as long as ACSA continues to invest in assets that are needed... it can never be unsustainable" is correct and is substantiated by the regulatory framework as outlined in the Airports Company Act 1993 which protects ACSA by granting a commercial return on assets. The regulatory framework cannot be refuted. As long as no unnecessary investments in infrastructure are made, the ACSA airports will always be sustainable. Tariffs will only rise if ACSA invests inefficiently, in other words over-invests in infrastructure. The regulatory framework ensures that ACSA’s traffic forecast is reviewed periodically . This is to ensure that the traffic forecast is relevant, current and informed by the latest industry and market shifts. This periodic review of the traffic forecast should ensure that ACSA does not invest in infrastructure that is not needed. As long as ACSA does not over-invest or build what is not needed, higher costs (tariffs) will not be passed on to the airlines. It is concerning to note this statement “We have forecasted ATM and passenger volumes and started an investment programme which does not consider the impact of CWA” which leads one to believe that ACSA is not taking into account shifting environmental factors such as new market entrants, in this instance the proposed expansion of CWA. Greater consideration for shifting market conditions will ensure that ACSA efficiently invests in required infrastructure that matches the demand, also noting that the CTIA capex programme can be adjusted. This will ensure that ACSA does not negatively impact the

			airlines, the travelling public and the industry at large by passing on unnecessary high costs to them. This is a technical business model argument; the CWA business plan indicates that CWA can co-exist with CTIA.
		8. Appendix 19: CONOPS Page 11 of 13 Study: 8.1. The CONOPS Study does not include a declaration of independence for the various authors contributing to the report. Whilst Appendix 17 (Civil Aviation Baseline) does include a declaration of interest, CWA should deploy a similar principle in the CONOPS report. As an Interested and Affected Party, ATNS should be invited and requested to register as an I&AP, and to provide an independent, detailed response on potential airspace conflicts and restrictions. From the list of comments and responses received, it does not appear that ATNS has been automatically registered as an I&AP and provided input in terms of the ATNS Act 45 of 1993. Their input has. only been included as a paid consultant as part of a specialist report. Page 46 of the Comments document states that "ATNS contributed to the development of the CONOPS, as the designated and acknowledged ANSP, they have not identified any airspace constraints to capacity with both airports in operations." It is however important to recognize that an ATNS individual was contracted to provide advice to CWA. However, we cannot see any formal comments from ATNS as an organization and independent I&AP. Neither DOT nor the SACAA Aerodrome and Airspace departments have provided any comments to this proposed development, and we wish to emphasize that in any parallel engagements between CWA and industry stakeholders (that may exclude the EAP), that these key stakeholders are reminded to include formal comments within the EIA process. (We note only the SACAA's Environmental Department has provided comments, but it needs to be confirmed if this department is representing all SACAA interests or just aviation environmental protection).	8. 8.1. Response by EAP: The CONOPS report forms part of the supplementary suite of studies and does not have to comply to the content requirements in terms of any specific protocol or Appendix 6 of NEMA, therefor it is unclear on what basis ACSA makes the request. ATNS has been included as an I&AP from the start of the Pre-application Scoping Phase of the EIA. To date no comments from ATNS has been received. ATNS, DOT and SACAA have been included as an I&AP from the start of the Pre-application Scoping Phase of the EIA. I&AP's can provide comments during the public commentary periods, but it is not mandatory for them to do so. Comments from SACAA has been received and included in the C&R.

		8.2. Page 14 of the CONOPS study states that "keeping CWA's IFR traffic outside or below CTIA airspace will not be possible". This effectively means that air traffic will in fact impact on CTlA's airspace and traffic, despite assurances by CWA to the contrary.	8.2. CWA Response: CWA traffic will share the Cape Town Terminal Airspace (TMA) with CTIA traffic, but it will not impact operations within the CTIA Control Zone (CTR). Airspace is a national asset. The terminal airspace in the Cape Town area exists for the protection of all air traffic. As the airspace is a national resource, all traffic is managed by air traffic control according to established ICAO Standards and Recommended Practices. The terminal airspace in the Cape Town area is designed to ensure the safety and efficiency of all flights within its boundaries. A supplementary study and simulation were initiated in response to the EIA comments and will be included in the impact assessment phase of the EIA. The purpose of the study is to further validate and reaffirm that: • FAWN and FACT can operate independently and safely with, considering both CTIA runways, 01/19 and its new realigned runway (NRR) runway configuration (s). • FACT arrival and departure tracks over FAWN will have sufficient distance to permit independent operations between the two airports. • Aircraft arriving and departing FACT permit sufficient vertical separation for aircraft to depart and arrive FAWN. Arriving and departing aircraft for the respective airfields can be separated laterally and vertically well within accepted industry norms and standards. • FAWN's compatibility with FACT, emphasising its strategic importance rooted in alignment with GANP and NAMP.
		8.3. Pages 47 — 51 of the CONOPS study still predominantly focuses on impacts to CTlA's current runway 01-19, when in fact this runway will be re-aligned as discussed above. Page 68 — 69 continues to state that "CTIA is currently investigating a re-alignment of its main runway". Please see paragraph 5 above. It is important to update the reports to confirm that	8.3. Please refer to section 5 above. The CONOPS will be updated to incorporate the re-aligned runway.

		the New Realigned Runway has now received the necessary approvals as formally communicated by the former Minister of Transport. All airspace design work, economic and viability studies must therefore fully consider the New Realigned Runway 18/36. 9. Additional responses to Appendix 30: Comments & Response Report 9.1. TAAM Simulation: Page 51 of 340: In our original comments submitted in December 2023, we stated that a TAAM simulation must be performed confirming that all future airspace demand can be accommodated. This is a reasonable request and should be studied in the CWA EIA if it realistically wants to assess the impact of its operations on airspace capacity. The response to this request recorded by the EAP was that CWA proposes further engagements as part of ongoing consultations between CTIA and CWA. The engagements between CTIA and CWA did partially address this requirement, but the assumptions behind the simulation are not detailed. The New Realigned Runway and second parallel runway at CTfA was not specifically addressed in the "airspace study". CWA must conduct a TAAM Simulation or equivalent simulation/study as one of its specialist studies in its EIA to determine ultimate airspace capacity and efficiency. 9.2. Airspace Capacity and Independent Operations: Page 53 of 340: In our original comments submitted in December 2023, we stated that an initial review of the reports indicates that there are likely to be dependencies due to the proximity of CTIA and CWA airspace. A more detailed study should be conducted. The response to this request recorded by the EAP was that "it has been demonstrated how the two airports can function operationally without any dependency" and that "the interaction between the air routes to and from the two airports has been described and any concern that there may be regarding adverse co-existence has been discussed." Also, "there is no basis for allegations of airport dependency, additional flight tracks, delays,	9. 9.1. CWA response: A fast time simulation to demonstrate and validate operations of the future airspace will be conducted. Requiring concept flight procedures to be demonstrated through fast-time simulations before completing any design work is inconsistent with the ICAO Document 9992 guidelines for airspace design. ICAO Document 9992 outlines a structured, phased approach to airspace design, ensuring that each phase builds on the previous one to achieve an optimized outcome. Fast-time simulation and validation of concept designs are intended to take place during phase three of the process, specifically within activities 11 and 13. At this point, the airspace design is sufficiently developed, allowing for realistic simulations that accurately reflect the intended operational environment. The proper sequence ensures that simulations are used effectively to validate and refine designs, in line with best practices and international standards, ultimately leading to safer and more efficient airspace management. 9.2. CWA Response: A supplementary study and simulation were initiated in response to the EIA comments and will be included in the impact assessment phase of the EIA. The purpose of the study is to further validate and reaffirm that: • FAWN and FACT can operate independently and safely with, considering both CTIA runways, 01/19 and its new realigned runway (NRR) runway configuration (s). • FACT arrival and departure tracks over FAWN will have sufficient distance to permit independent operations between the two airports.

		holding, additional emissions, capacity constraints, safety degradation, higher fuel burn, as was demonstrated in the NLR Fast Time Simulation". The studies to date have been limited to conceptual work and ACSA's concerns regarding independent airspace have not been adequately addressed because the studies do not fully consider the New Realigned Runway and the future second parallel runway. It is assumed that the above-mentioned NLR Fast Track Simulation only took the existing operations into account, and not CTlA's New Realigned Runway and the future second parallel runway. It is important that CWA completes design work, including computer simulations which fully consider the NRR and consider the potential impact of a second new runway in future. This will allow all interested and affected parties to fully understand the future implications for CTIA. Should a detailed study indicate that it is not possible to achieve completely independent airspace operations, then any approval to proceed with CWA}s development proposal must include a condition that restrictions shall be imposed on CWA's airspace operations and not CTlA's airspace operations, since CTIA is an existing approved international airport with regulatory approval for its expansion plans. ACSA notes CWA has commenced various engagements and formed task committees to seek approval via NASCOM (National Airspace Committee). It is at NASCOM that many of the technical concerns ACSA has that fall outside of the EIA process, can be discussed and resolved. ACSA appreciates the opportunity to comment on the proposed CWA development, and trusts that these comments will be addressed in the EIA.	• Aircraft arriving and departing FACT permit sufficient vertical separation for aircraft to depart and arrive FAWN. Arriving and departing aircraft for the respective airfields can be separated laterally and vertically well within accepted industry norms and standards. • FAWN's compatibility with FACT, emphasising its strategic importance rooted in alignment with GANP and NAMP. It is not foreseen that it will not be possible to achieve independent airspace operations between FACT and FAWN. NASCOM and its sub structures are fully engaged.
183	Meroline Ockhuis - **CoCT Air Quality Management**	*Email dated 24 July 2024:* 1. Noted, as received. AQM will provide our comment via the City's competent Department for EIA's.	1. This comment is noted.

184	Timothy Irvine - **Morningstar Flying Club**	*Email dated 24 July 2024:* 1. The link does not work to your website. Could you assist with copies of the documentation? *Email sent to CWA dated 24 July 2024:* 2. I can't access the website for the reports and the emails bounce back. Can you facilitate access? *Reply received on 24 July 2024:* 3. Thanks I got access on the link	*Email response provided on 24 July 2024:* 1. I tried access to the website from our side and it seems to be working. Please try again on https://phsconsulting.co.za/proposed-expansion-of-cape-winelands-airport/ Please confirm once you are successful. 3. This comment is noted
185	Bert van Koersveld - **Spot On Civil Services**	*Email dated 24 July 2024:* 1. Many thanks for your "Correspondence". The planning seems to be at advanced stage. ….landside and airside … I wish you all the best with this endeavour, this will surely put Durbanville , the airport, on the MAP .	1. This comment is noted.
186	Fahldie Damon - **HLQ Recycle**	*Email dated 23 July 2024:* 1. I'm willing to participate in the project as I'm looking forward to be part of the project. As I'm looking at other fields of work we're we can create Job creation. I'm also doing recycling to help and educate the people in the waste sector as there is to much waste which can be used and provide income for the less fortunate. So what use are doing is good so I wount back out from the data base use provide.	1. This comment is noted.

187	Vanessa Stoffels - **Department of Infrastructure**	*Email dated 24 July 2024:* 1. The message below refers to your application for the rezoning of a property (Application No - 30717-1) submitted to the Western Cape Government on 23.07.2024 Related: Proposed Expansion of Cape Winelands Airport The matter is receiving attention and further communication will be addressed to you as soon as circumstances permit.	1. This comment is noted.
188	Charl Starke - **Grootfontein Airfield (FAGF)**	*Email dated 24 July 2024:* 1. Please register me as an IAP for this project. I own Grootfontein Airfield (FAGF) within two km of Winelands	*Email response provided on 24 July 2024:* 1. You will be registered as an IAP for the proposed project.
189	Adri La Meyer - **Directorate: Development Facilitation**	*Email dated 24 July 2024:* 1. Your email of 23 July 2024 refers. I note that a WULA Technical Report is included in the documents available for download. Please could you indicate which documents must be read together for the application for a WUL and the deadline for comments on the WULA? Section 41(4)(a) of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA") states that: "(4) A responsible authority may, at any stage of the application process, require the applicant – (a) to give suitable notice in newspapers and other media – (i) describing the licence applied for; (ii) stating that written objections may be lodged against the application before a specified date, which must be not less than 60 days after the last publication of the notice." (own emphasis).	*Email response provided on 24 July 2024:* 1. The 60 days for comment on the WULA technical report will be completed as 30 days within the Scoping Phase and 30 days within the Impact Assessment Phase of the application in order to accommodate the requirements of the "One Environmental System" application process. This is in agreement with DWS. Therefor you are welcome to comment on the WULA technical report within this 30-day period or to collate your comments on the WULA for the next round of 30 days within the Impact Assessment Phase. If you comment on the WULA technical report within this 30-day Scoping period, you are also welcome to amend these during the next 30 days commenting period based on additional information becoming available should you so wish. The WULA technical report included as Appendix 31 with the Scoping report, indicates which documents should be read with it – the Freshwater Ecological report is included as Appendix 8 to the Scoping report; the Hydropedological report is included as Appendix 34 to the Scoping report; the Geohydrological for Scoping is included as Appendix 2 to the Scoping report; and the Geohydrological report in support of a

		We therefore believe that the WULA must be subjected to a commenting period of 60 days. Please confirm the deadline for comments on the WULA and the documents that must be consulted. Ideally, I&APs should be notified of the 60-days commenting period for the WULA and the associated documents to consult. Please further note that the DDF will only collate comments on the WULA and AEL application (once available for comments). *Reply dated 29 July 2024:* 2. Many thanks for the response to my email query. I suspect the components would only want to provide comments at the end of the EIR phase. I will however ask them to provide prelim comments on the mentioned specialist assessments and Technical Report during the scoping phase, with our final comments to be provided at the EIR phase. Note that Shehaam Brinkhuis is leaving our Dept. on Wednesday, which leaves only 1 official and 1 manager at our Pollution & Chemicals Management Directorate responsible for commenting on EIA and WUL applications. I don't think Shehaam's post will be filled soon (if at all).	WULA has been appended to the WULA technical report as Appendix A (you will see it is one download). This was done in order to minimise the amount of document duplication where both the Scoping report and the WULA technical report refers to the same documents. Notification of the WULA and the commenting period was included in the IAP notification for the Scoping report. Please let me know if I can assist with anything else
190	JP Matthee - **Prime OHS Management**	*Email dated 24 July 2024:* 1. Received and noted thank you.	1. This comment is noted.
191 & 216 & 233	Milna Blignaut - **Orsmond Aerial Spray (PTY)LT**	*Email dated 29 July 2024:* 1. What is required to register us as an interested party? I do not see a form on the website.	*Email response provided on 29 July 2024:* 1. Information on how to register is in the CWA Background Information and how to comment document (page 7) at https://phsconsulting.co.za/proposed-expansion-of-cape-winelands-airport/

		Reply dated 29 July 2024: 2. As per Page 7 of the link below: I understand that we have to review the document and submit our written comments (Before 26th August 2024) to you. Will we then be registered as an interested party?	*Email response provided on 29 July 2024:* 2. You can choose to be registered now and to provide comment later or be registered as an IAP when you provide the comment. Everyone who provides comment is automatically registered as an IAP.
		Email dated 20 August 2024: 1. I trust you are well. Please register Orsmond Aerial Spray (Pty) Ltd as an interested party. Kindly let me know what information you require for this registration.	*Email response provided by EAP 20 August 2024:* 1. Thank you for the email. We will register Orsmond Aerial Spray (Pty) Ltd as an interested party with the information provided.
		Email dated 26 August 2024: 1. I trust you are well. Herewith Westelike Provinsie Oesbespuiting Maatskappy commentary. *Letter received via email dated 26 August 2024:* 1. Introduction As a company providing essential aerial application services to farmers within the proposed airport's control zone (CTR), we wish to highlight specific concerns regarding airspace control and the potential impact on our operations. Our services are vital to the agricultural sector in this region, and any changes in airspace regulations could significantly affect our ability to operate safely and efficiently. 2. Current Operations Our company conducts aerial application flights from ground level up to 500 feet above ground level (AGL). These operations are conducted from farmers' airstrips that fall within the proposed CTR, and they are crucial to the	*Email response provided by EAP 26 August 2024:* 1. I acknowledge receipt of your email and the contents thereof. Response to letter by CWA: Concerns of the crop spraying and agricultural sectors and their operations are well appreciated and understood, as some of the current CWA operators are crop sprayers themselves. CWA notes that engagements with the crop spraying sector have also commenced and are ongoing. Although the proposed airport development and associated airspace could impact on agricultural operations, it is the intent of CWA to create special operational procedures and control measures to safely incorporate these operations into the area. To this end, the Concept of Operations (ConOps) document which has been published alongside the EIA is a crucial high-level requirements document outlining the planned activities and airspace utilisation at the airport and surrounds. The initial ConOps deliberately focuses on broad concepts rather than specific details to maintain

		agricultural productivity of the area. Our flights are weather-dependent, meaning they can only be performed during favorable conditions. On a typical day, we might conduct up to 40 flights, with operations spanning from sunrise to sunset. Several of the agricultural fields we serve are located in close proximity to the proposed runway centerlines, making these operations particularly vulnerable to changes in airspace management. 3. Potential Impacts 3.1. Airspace Restrictions: The establishment of the new airport and its associated CTR will likely impose restrictions on low-altitude flights within the zone. This could severely limit our ability to operate in the affected areas, particularly along the runway centerlines. The imposition of these restrictions without adequate consideration of agricultural aviation needs may result in reduced efficiency, increased operational costs, and potential risks to both aerial applicators and other airspace users. 3.2. Increased Traffic and Safety Concerns: The introduction of a new airport will increase air traffic within the region, raising concerns about the safety of our low-altitude operations. The proximity of our flight paths to the proposed runway centerlines exacerbates the risk of mid-air conflicts, especially during takeoff and landing phases of aircraft using the airport. 3.3. Weather Dependency: Our operations are highly weather-dependent, meaning that any delays or restrictions caused by increased air traffic or airspace control measures could result in missed opportunities to conduct essential agricultural flights. This would not only impact our operations but also the agricultural output of the region. 3.4. Communication and Coordination: Effective communication and coordination with air traffic control (ATC) will be essential to ensure the safety of our operations. However, the increased complexity of managing diverse airspace users, incfuding both commercial and agricultural aviation, could lead to delays and misunderstandings that may jeopardize safety. Our company is committed to maintaining safe and efficient aerial application services for the agricultural community. We believe that with thoughtful planning and cooperation, the construction of the new airport can proceed without unduly compromising our ability to serve local farmers. We look forward to working with	flexibility as the project evolves. This flexibility is vital for adapting to changes and addressing stakeholder concerns, including those related to crop spraying, as they arise. Where specific details are not included, it does not signal any intention to abandon or diminish the rights or privileges of stakeholders in the final design process. In parallel and following the ConOps, CWA has embarked on an airspace development process within with the formal National Airspace Committee (NASCOM) channels, where the concerns and user requirements of all aviation stakeholders, including agricultural aviation, are being considered. The airspace development process being followed is in fact the internationally recognised and accepted ICAO Document 9992 approach (International Civil Aviation Organisation Manual on the use of Performance Based Navigation in Airspace Design). This ensures that all operational aspects, such as agricultural aviation, are thoughtfully considered. CWA is thankful for your comments and commitment to working together, and too believes that with thoughtful planning and cooperation, appropriate measures can be put in place to accommodate both the airport's and agricultural aviation's operations.

		the relevant authorities to develop airspace control measures that accommodate both the airport's operations and the needs of agricultural aviation.	
192	Michelle Lockey	*Email dated 31 July 2024:* 1. Could you please add the following as interested parties: Desmond Lockey [redacted] Michelle Lockey [redacted]	*Email response provided 31 July 2024:* 1. The below will be added as I&APs for the proposed project.
193 & 213 & 226	Clarissa Fransman - **CoCT Spatial Planning and Environment Directorate** & Natasha Bieding - **DEADP Directorate: Development Management (Region 1)**	*Email from CoCT dated 23 July 2024:* 1. The Scoping Report indicates that a Comments and Responses Report is appended as Appendix 30, however appendices on PHS's website only has up until Appendix 28. Could you kindly forward the missing Appendix 29 and 30 via email please. *Email from CoCT dated 1 August 2024:* 2. Our earlier telephonic conversation refers. This email serves to record that a request was made for an extension to provide comment on the CWA expansion Scoping Report. As indicated by yourself telephonically, no extension can be provided for the submission of comment.	*Email response provided to CoCT on 23 July 2024:* 1. Thank you for the email. As discussed telephonically, the website was still being loaded when you started your download. All the information has been loaded now and should be available for you to download. Please let me know should there be any problems *Email response provided to CoCT on 1 August 2024:* 2. I confirm that no extension of timeline to provide comments on the in-process Scoping report can be granted past the COB deadline for 26 August 2024. The timeline for the NEMA process is regulated and requires submission of the final documentation to DEA&DP by 5 September 2024. Please note that an additional 30-day commenting period is allowed for in the Impact Assessment Phase of the NEMA process, and as a registered IAP you will be notified when this period starts.

		Email dated 15 August 2024: 1. Herewith follows a notification pertaining to your client's Scoping and EIA application, i.e.: 16/3/3/2/A5/20/2046/24 PROPOSED EXPANSION OF THE CAPE WINELANDS AIRPORT ON PORTION 10 OF FARM 724, REMAINING EXTENT OF FARM 724, PORTION 23 OF FARM 724, PORTION 7 OF FARM 942, REMAINING EXTENT OF FARM 474, PORTION 3 OF FARM 474 AND PORTION 4 OF FARM 474, FISANTEKRAAL, DURBANVILLE It has come to this Directorate's attention that the City of Cape Town will be submitting their comments on the draft Scoping Report late, i.e. likely outside the 30-day commenting period with respect to the draft Scoping Report. In light of the above, this Directorate hereby request that the pending comment from the City of Cape Town be included and addressed during the EIA phase. This Directorate trust that all will be in order.	*Email response provided to CoCT on 15 August 2024:* 1. Thank you for the email. We acknowledge receipt of your communication and contents thereof.
		Email from CoCT dated 23 August 2024: 1. Trust you are well. Please find attached letter for your attention. *Email to Natasha.Bieding@westerncape.gov.za dated 23 August 2024:* 2. Trust you are well. For your information (I erroneously did not include you In the original email) *Letter received from CoCT via email dated 23 August 2024:* 3. Your email correspondence, dated 23 July 2024, the accompanying Notification letter dated 17 July 2024 and the Draft Scoping Report (dated July 2024), pertaining to the proposed expansion of the existing Cape Winelands Airport on Portion 10 of Paarl Farm 724, Remainder of Paarl Farm 724, Portion 23 of Paarl Farm 724, Portion 7 of Paarl Farm 942, Remainder of Paarl Farm 474, Portion 3 of Paarl Farm 474 and Portion 4 of Paarl Farm 474, Fisantekraal, refer.	*Email response provided to CoCT on 23 August 2024:* 1. Thank you for the letter and I take note of the content. 2. The communication to Natasha Bieding is noted.

		a. It is recorded that an extension to provide City of Cape Town (the City) comment on the circulated Draft Scoping Report was requested telephonically with subsequent email correspondence dated 1 August 2024, and was denied. b. The City hereby advise you that due to the strategic impact of this application on the City's policy and infrastructure, the comment on the circulated Draft Scoping Report is currently under consideration by the executive of the City. *c.* As such, the City comment will reach you on or before 29 August 2024. The City will, however, ensure that the comment is not delayed beyond this date.	
194	Maruwaan Moses - SACO	*Email dated 1 August 2024:* 1. Could you kindly confirm if there's any access control, CCTV or guarding requirements in the pipeline for the proposed expansion?	*Email response provided on 1 August 2024:* 1. The proposed project is currently in the NEMA application process and detail of access control, CCTV or guarding requirements are not available as yet. You are welcome to visit the CWA website to register as a supplier. You have been registered as an I&AP for the proposed project.
195	Khahliso Lefatsa - Myezo Sustainable Development NPO	*Email dated 2 August 2024:* 1. I hope that all is well with you. Thank you for the email. We reached some time ago to Cape Winelands Airport seeking to be included in Corporate Social Responsibility endeavours that pertain to ecological restoration and indigenous environmental stewardship. We are a very young organization that seeks to create green ecological footprints and by that generate carbon credits which can be used to enhance green corridors in the Cape Winelands townships. We believe in the removal of invasive species and replanting indigenous tree and fynbos as part of our initiative of promoting biodiversity which not only is linked to environment health, but also to human health. Your guidance, assistance and inclusion to Cape Winelands airport initiative can be well received - as we have often been neglected by bigger players for years. I have attached some of the work that we do in our communities in the Paarl and Wellington areas.	*Email response provided on 2 August 2024:* 1. Thank you for the email and we take note of your comments. The proposed project is currently out for 30 days comment as part of the in-process Scoping Phase. Please make use of the CWA website to register as a proposed supplier.

		The following documents were attached to the email and have been included as Appendix A (C195): • *Myezo Sustainable Development NPO overview document* • *Tree planting with Myezo advertisement*	
196	Frans de Jongh - Local Resident	*Email dated 2 August 2024:* 1. I am writing to formally register as an Interested and Affected Party (I&AP) for the proposed Expansion of Cape Winelands Airport. Please find my contact details below: Name: Frans de Jongh Email: [redacted] Phone: [redacted] I would like to stay informed and involved in the public participation process for this project. Thank you for your attention to this matter.	*Email response provided 3 August 2024:* 1. You will be registered as an I&AP for the proposed project. The in-process Scoping Phase public participation period of 30 days from 24 July up to and inclusive of 26 August 2024 is currently running. Please consult our website at https://phsconsulting.co.za/proposed-expansion-of-cape-winelands-airport/ for further information on how to comment and documents to comment on.
197	Julius Kisielius - Local Resident	*Email dated 3 August 2024:* 1. I would like to register myself as an affected and interested party. I reside in Nerina, Durbanville. We are approximately 11km from the Cape Winelands Airport. My main concern is being on the flight path of landing planes. The hours the planes would be allowed to take off and land. This would all contribute to the increase of noise pollution of where I live. Additional concerns would be traffic in the area leading to the airport, all roads are single lane traffic currently. Being an international airport, this would increase traffic considerably.	*Email response provided 3 August 2024:* 1. Thank you for your email. You will be registered as an I&AP for the proposed project and your comments will be recorded and responded to in the Comments and Responses report. Response by EAP: A Noise impact Assessment and Traffic Impact Assessment for part of the EIA Phase for the proposed project and all registered I&APs will be notified of the commenting period and the opportunity to consider and comments on these studies.

198	Natasha Bieding - DEADP Directorate: Development Management, Region 1	*Email dated 5 August 2024:* 1. Please find attached this Directorate's correspondence regarding Proposed Expansion of the Cape Winelands Airport on Portion 10 of the Farm No. 724, Remaining Extent of the Farm No. 724, Portion 23 of the Farm No. 724, Portion 7 of the Farm No. 942, Remaining Extent of the Farm No. 474, Portion 3 of the Farm No. 474 and Portion 4 of the Farm No. 474, Fisantekraal, Durbanville. *Letter received via email on the 5th of August 2024:* ACKNOWLEDGEMENT OF RECEIPT OF THE APPLICATION FORM FOR ENVIRONMENTAL AUTHORISATION, THE DRAFT SCOPING REPORT ("SR") AND THE PLAN OF STUDY ("POS") SUBMITTED IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) ("NEMA") AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED) FOR THE PROPOSED EXPANSION OF THE CAPE WINELANDS AIRPORT ON PORTION 10 OF THE FARM NO. 724, REMAINING EXTENT OF THE FARM NO. 724, PORTION 23 OF THE FARM NO. 724, PORTION 7 OF THE FARM NO. 942, REMAINING EXTENT OF THE FARM NO. 474, PORTION 3 OF THE FARM NO. 474 AND PORTION 4 OF THE FARM NO. 474, FISANTEKRAAL, DURBANVILLE 1. The Application Form (dated 19 July 2024), the Screening Tool Reports (dated 31 May 2023 and 9 April 2024), the Site Sensitivity Verification ("SSV") Report (dated 13 October 2023 - updated 15 July 2024), the Project Schedule (dated 16 July 2024), the draft SR and POS (dated 22 July 2024) as well as the supporting documentation, received by this Directorate via electronic mail correspondence on 23 July 2024, refer. 2. This letter serves as an acknowledgement of receipt of the aforementioned documents by this Directorate. 3. This Directorate will provide comments on the draft SR and POS and supporting documentation within the prescribed timeframes and advise you accordingly. 4. Based on the information provided by you, this Directorate notes that the proposed development comprises the phased expansion of the existing Cape Winelands Airport, inclusive of the following Precincts:	1. This comment is noted Response to letter by EAP: 1. This comment is noted. 2. This comment is noted. 3. This comment is noted 4. The comment is noted.

		4.1. Precinct 1: Airside Precinct Development, comprising of the construction of the following: 4.1.1. A primary runway with an orientation of 01-19, a length of approximately 3.5km and a runway zone width of approximately 570m; 4.1.2. Airside systems; 4.1.3. Aircraft parking aprons; 4.1.4. Airside service roads; 4.1.5. Airport security fence; 4.1.6. Refurbishment of a secondary cross runway with an orientation of 14-32 and a length of approximately 700m; and www.westerncape.gov.za Department of Environmental Affairs and Development Planning 2 4.1.7. Construction and installation of associated infrastructure for bulk electrical supply. 4.2. Landside Precinct Development, comprising of the construction of the following: 4.2.1. A Passenger Terminal Building; 4.2.2. A 'Very Important Person Processing Facility; and 4.2.3. Commercial developments, including inter alia a terminal plaza with a landmark hotel building, aviation museum, amphitheatre, offices, and 'MICE' developments, hangars, aviation clubs, an aviation training centre, workshops, light manufacturing, logistics, warehousing and food processing. 4.3. General Aviation Precinct, comprising of the construction of the following: 4.3.1. General aviation areas; 4.3.2. A business aviation area(s); 4.3.3. FBO (Fixed Base Operators) facilities; 4.3.4. A General Aviation kerbside refuelling station; 4.3.5. A clubhouse; and 4.3.6. Grass parking areas.	

		4.4. Services Precinct, comprising of the construction of the following: 4.4.1. Aircraft rescue and firefighting (ARFF) services; 4.4.2. Airport maintenance; 4.4.3. Ground support equipment (GSE); 4.4.4. Maintenance and staging, cargo, aircraft maintenance, repair and overhaul (MRO) and aircraft fuel facilities; 4.4.5. Airport operations centre; and 4.4.6. Solar Photovoltaic and a biodigester. 4.5. Additional developments and components, comprising of the construction of the following: 4.5.1. A petrol service station; 4.5.2. A hotel; 4.5.3. Access, egress and an internal vehicular road system; 4.5.4. Drop and go facilities which will allow passengers to drop passengers off close to the passenger terminal building; 4.5.5. Car rental facilities; 4.5.6. Vehicular parking (multi-storey parking, at-grade parking); 4.5.7. Pedestrian walkways; 4.5.8. Substations; 4.5.9. Billboards (indoor and outdoor, static and electronic); 4.5.10. Droneport and vertiports; 4.5.11. Gardens; 4.5.12. Public transport facilities; 4.5.13. Carpark/VTOL; 4.5.14. Final approach and take-off infrastructure; 4.5.15. AVGAS station; 4.5.16. Substation; 4.5.17. Remote Digital Control Tower; 4.5.18. Fuel facilities; 4.5.19. Aircraft rescue and firefighting facilities; 4.5.20. Cargo facility; 4.5.21. Airport maintenance facilities; 4.5.22. An MRO facility, including apron and taxiway; 4.5.23. A catering building;	

		4.5.24. An airport operations centre; and 4.5.25. An air traffic control centre 5. Applicable Listed Activities 5.1. Having considered the information contained in the Application Form, this Directorate confirms that the proposed development constitutes the following Listed Activities in terms of the EIA Regulations, 2014 (as amended): 5.1.1. Listed Activities 9, 10, 12, 13, 16, 19, 24, 25, 26, 28, 48, 56 and 61 of Listing Notice 1 of the EIA Regulations, 2014 (as amended); 5.1.2. Listed Activities 1, 4, 7, 15, 27 of Listing Notice 2 of the EIA Regulations, 2014 (as amended); and 5.1.3. Listed Activities 1 2, 3, 4, 12, 18 and 19 of Listing Notice 3 of the EIA Regulations, 2014 (as amended). 5.2. You are hereby advised that only those Listed Activities applied for in terms of the EIA Regulations, 2014 (as amended) will be considered for authorisation. 5.3. Due to the nature and scale of your proposed development, please be informed that should it be determined at any point in time that other Listed Activities in addition to the above are also triggered by the proposed development, this Directorate must be duly informed so that a written way forward can be determined and confirmed by the Competent Authority. 5.4. The onus is on the applicant to ensure that all the applicable Listed Activities are applied for and assessed as part of the Scoping and EIA process. Failure to include any applicable Listed Activity may invalidate the application. 6. Water Use License Application ("WULA") 6.1. It is indicated in the abovementioned Application Form that a WULA will be required for the development proposal. 6.2. In light of the above your attention is drawn to the following:	5. 5.1. The confirmation of the listed activities in the Application Form is noted. 5.2. The comment is noted. 5.3. The EAP takes note of this requirement. 5.4. The comment is noted. 6. 6.1. The statement is correct.

		6.2.1. You are advised that the Standard Operating Procedure ("SOP") between the Department and the National DWS, which came into effect on 1 July 2017, must be complied with. 6.2.2. In terms of the Agreement for the One Environmental System (Section 50A of the NEMA and Sections 41(5) and 163A of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA")) the processes for a WULA and for an EIA must be aligned and integrated with respect to the fixed and synchronised timeframes, as prescribed in the EIA Regulations, 2014 (as amended), as well as the WULA Regulations of 2017. 6.2.3. The required water use application request must be submitted to the National DWS. Proof of the submission of the WULA to the National DWS must be included in in all subsequent reports. 7. Heritage Resources 7.1. It is noted that the development proposal triggers Section 38(1) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). 7.2. It is further noted that a Notice of Intent to Develop ("NID") was previously submitted to Heritage Western Cape ("HWC") and feedback was provided, as per there correspondence (dated 23 November 2023). 7.3. Based on the correspondence from HWC (dated 23 November 2023), you must adhere to the following requirements: 7.3.1. HWC must form and remain part of the key authorities to be consulted during application processes. 7.3.2. All relevant requirements as per the correspondence (dated 23 November 2023) from HWC must be met, including, inter alia, the compilation of a required Heritage Impact Assessment. 7.3.3. The Record of Decision ("RoD") and/or comments obtained from HWC must be appended to the final report submitted for decision-making to this Directorate. 8. Confirmation of Availability of Municipal Services Service confirmation letters from the selected service providers for water supply, solid waste removal,	6.2. The comment is noted. The EIA and WULA processes are integrated in terms of the "One Environmental System" and proof of submission of the WULA to DWS will be included in all future reports. The project plan submitted with the AEA illustrates the integration of authorisation processes in terms of timelines. The WULA process has been initiated with DWS and preliminary information submitted on the e-wulaa system. Two pre-consultation meetings have been held with DWS. 7. 7.1. Noted 7.2. Noted 7.3. 7.3.1. HWC is part of the State Departments consulted as part of the required PPP for the Scoping Phase and will remain as such. 7.3.2. The EAP takes note of this requirement 7.3.3. The EAP takes note of this requirement. 8. The EAP takes note of this requirement.

		effluent disposal and treatment as well as electricity must be provided with the submission of the final Scoping Report, or if not possible, the draft and final EIA Reports to this Directorate. 9. Screening Tool, Protocols, Site Sensitivity Verification and Specialist Assessments 9.1. Screening Tool Report 9.1.1. This Directorate notes that two (2) Screening Tool Reports (dated 31 May 2023 and 9 April 2024) have been provided. 9.1.2. The following specialist assessments were identified in the Screening Tool Reports (dated 31 May 2023 and 9 April 2024, respectively): 9.1.2.1. An Agricultural Impact Assessment; 9.1.2.2. An Archaeological and Cultural Heritage Impact Assessment; 9.1.2.3. A Palaeontological Impact Assessment; 9.1.2.4. A Terrestrial Biodiversity Impact Assessment; 9.1.2.5. An Aquatic Biodiversity Impact Assessment; 9.1.2.6. An Avian Impact Assessment; 9.1.2.7. A Civil Aviation Assessment; 9.1.2.8. A Defense Assessment; 9.1.2.9. Noise Impact Assessment; 9.1.2.10. A Traffic Impact Assessment; 9.1.2.11. Geotechnical Assessment;	9. 9.1. 9.1.1. The original screening tool report (31 May 2023) was based on the placement of all seven the affected farm boundaries as the site footprint, and the placement of the development footprint within this site footprint. The Infrastructure/Transport Services/Airport/Runways/Landing Strip/Helipad – Commercial sector classification was chosen. The screening tool report was rerun (9 April 2024) with the same affected footprint. No changes were noted between the two screening tool reports, but both reports are included as proof. 9.1.2. The list of specialist studies identified in the Screening tool reports is acknowledged. Please note that the outcome of the HIA will determine the level of heritage related specialist studies.

		9.1.2.12. A Socio-Economic Impact Assessment; 9.1.2.13. A Plant Species Assessment; and 9.1.2.14. An Animal Species Impact Assessment. 9.2. The Protocols 9.2.1. The "Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation" ("the Protocols") were published on 20 March 2020 (Government Notice No. 320 as published in Government Gazette No. 43110 on 20 March 2020) and the Protocols are applicable to your proposed development. 9.2.2. Be advised that the Protocols must be complied with for every new application that is submitted after 9 May 2020. 9.2.3. It was noted from the Environmental Assessment Practitioner's ("EAPs") motivation included in the abovementioned Application Form, that all of the specialist studies as per the abovementioned Screening Tool Reports will be conducted, except for the Defense Assessment.	9.2. 9.2.1. The comment is noted 9.2.2. The comment is noted and will be complied with 9.2.3. The comment is noted. The site rates as MEDIUM in terms of Defence due to its proximity to a Military and Defence Site to the southwest of the site, the Goedverwacht communications base approximately 4km as the crow flies southwest of CWA. ATNS has conducted an Obstacle Assessment Report (OLS) and in association with NACO, an Airspace CONOPS to understand the transition from CWA current uncontrolled airspace to a controlled airspace with instrument procedures in place. The study confirms that the CWA and immediate surrounds are not used for any defence operations and that it is currently a private airport operating under a specific radar frequency. It further confirms that the proposed airspace procedures required for the expansion at CWA do not interfere with military airspace based on publicly available information. The study further indicated that there will not be a need for new communication system frequencies, and that frequency interference with existing defence installation and radar systems is unlikely. Considering the proposed VHF Omnidirectional Range (VOR) and Very High Frequency Data

		9.2.4. Further to above, it is detailed in the abovementioned Application Form that the following specialist studies will additionally conducted/form part of the application process: 9.2.4.1. An Air Quality Impact Assessment; 9.2.4.2. A Visual Impact Assessment; 9.2.4.3. A Geohydrology Impact Assessment; 9.2.4.4. An Archaeological Baseline Assessment; 9.2.4.5. A Climate Change Impact Assessment;	Broadcast (VDB) proposed for the expansion of the CWA these mechanisms will only be beneficial for any defence installation if required. Although detail regarding SANDF and SAAF installations are not known to the public the intent is not to pinpoint or highlight is. By knowing the dynamic of radar and the requirement for operational effectiveness the preliminary assessment regarding the proposed CWA development indicated that it is highly likely that the proposed expansion will have a low impact on defence installations. Based on the information obtained via the OLS and additional Airspace studies the EAP recommends that the rating be LOW and no further specialist studies required. The SANDF, the SAAF and NASCOM was included as IAPs on the project and consultation on this position is ongoing in order to gather input regarding further requirements. During the pre-application Scoping report public participation, no comments were received that counters the EAP's position. The need for a Glint and Glare assessment with relation to the Solar PV has been identified and will be included in the formal EIA process. 9.2.4. The list of additional studies is noted.

		9.2.4.6. A Terrestrial Biodiversity Offset study; 9.2.4.7. A Freshwater offset study; 9.2.4.8. A Hydropedological study; 9.2.4.9. A Glint and Glare study; and 9.2.4.10. A Major Hazardous Installation risk assessment. 9.2.5. In light of the above, please note that specialist studies/compliance statements conducted during the application phase must meet the requirements of the Protocols by the time the draft reports are submitted to the Competent Authority. 9.2.6. Appendix 6 of the EIA Regulations, 2014 (as amended) must be met for certain specialist studies, where no Protocol exists. 9.3. Site Sensitivity Verification and Specialist Assessments 9.3.1. According to the Protocols, before commencing with a specialist assessment, the current use of the land and environmental sensitivity of the site under consideration identified by the Screening Tool must be confirmed by undertaking a SSV. The outcome of the SSV must be recorded in the format of a report. 9.3.2. This Directorate notes that the outcome of the SSV has been recorded in the format of a report. 9.3.3. The motivation for not conducting any specialist studies, as identified in the Screening Tool Report, is noted. However, please note that should any authority that have jurisdiction in respect of any aspect of the proposed development request that further specialist studies be conducted, and where the request is supported by this Directorate, this must take precedence. 9.3.4. Furthermore, should it be determined during the Scoping and EIA application process that other specialist studies would be required in addition to those mentioned above, then the applicable requirements in terms of the Protocols and/or Appendix 6 of the EIA Regulations, 2014 (as amended) must be met.	9.2.5. The comment is noted. 9.2.6. The comment is noted. 9.3. 9.3.1. The requirement is noted. 9.3.2. The comment is noted 9.3.3. The requirement is noted 9.3.4. The requirement is noted. 9.3.5.

		9.3.5. Please note that this Directorate's comments on the abovementioned SSV Report are, as follows: 9.3.5.1. Please ensure that the following studies meets the requirements of the applicable Protocol and associated environmental theme (if considered as full specialist study) – 9.3.5.1.1. Agricultural Impact Assessment; 9.3.5.1.2. Terrestrial Biodiversity Impact Assessment; 9.3.5.1.3. An Aquatic Biodiversity Impact Assessment; 9.3.5.1.4. An Avian Impact Assessment; 9.3.5.1.5. A Civil Aviation Assessment; 9.3.5.1.6. Noise Impact Assessment; 9.3.5.1.7. A Plant Species Assessment; and 9.3.5.1.8. An Animal Species Impact Assessment. 9.3.5.2. Please ensure that the following study meet the requirements of the Appendix 6 of the EIA Regulations, 2014 (as amended) or the relevant SANS Codes / Industry Standards – 9.3.5.2.1. An Archaeological and Cultural Heritage Impact Assessment; 9.3.5.2.2. A Palaeontological Impact Assessment 9.3.5.2.3. A Traffic Impact Assessment; 9.3.5.2.4. Geotechnical Assessment; 9.3.5.2.5. A Socio-Economic Impact Assessment; 9.3.5.2.6. An Air Quality Impact Assessment; 9.3.5.2.7. A Visual Impact Assessment; 9.3.5.2.8. A Geohydrology Impact Assessment; 9.3.5.2.9. A Climate Change Impact Assessment;	9.3.5.1. The requirement is noted and will be complied with. 9.3.5.2. The requirement is noted. The following response email was sent to DEADP on 8 August 2024: Our conversation yesterday afternoon regarding point 9.3.5.2 in the attached letter refers. The draft Scoping report distinguishes between specialist reports and technical reports. The specialist reports comply with either the protocol (if identified in the Screening tool) or in absence of an applicable protocol (or where studies were commissioned in addition to those of the Screening tool) the outline and content complies with Appendix 6 of the NEMA Regs. Technical reports provide background information to the proposed project and do not necessarily comply with the protocol requirements or Appendix 6 of NEMA. The following reports from your list in 9.3.5.2 are technical reports that do not comply with the requirements of Appendix 6 of NEMA but do comply with the relevant SANS Codes / Industry Standards:

		9.3.5.2.10. A Freshwater Offset study; 9.3.5.2.11. A Glint and Glare study; 9.3.5.2.12. A Major Hazardous Installation risk assessment; and 9.3.5.2.13. Terrestrial Biodiversity offset study.	9.4. Geotechnical report (point 9.3.5.2.4) 9.5. Freshwater OUset study (point 9.3.5.2.10) 9.6. Glint and Glare study (point 9.3.5.2.11) 9.7. Major Hazardous Installation risk assessment (point 9.3.5.2.12) 9.8. Terrestrial Biodiversity offset study (point 9.3.5.2.13) Please note no Palaeontological Impact Assessment (point 9.3.5.2.2) was completed or is planned as the rating on the Screening report was LOW and the EAP motivated for no further specialist study in the SSV. The Archaeological and Cultural Heritage Impact Assessment (point 9.3.5.2.1), Traffic Impact Assessment (point 9.3.5.2.3.), Socio-Economic Impact Assessment (point 9.3.5.2.5.), Air Quality Impact Assessment (point 9.3.5.2.6.), Visual Impact Assessment (point 9.3.5.2.7.), Geohydrology Impact Assessment (point 9.3.5.2.8.), Climate Change Impact Assessment (point 9.3.5.2.9.) will comply to the requirements of Appendix 6 of the EIA Regs, 2014. Also note the Hydropedological study (Appendix 34 to the Scoping report) was requested by DWS and completed in lieu of the WULA, and information from it was included in the Scoping report as background. Therefor it does not have to comply to Appendix 6 of NEMA in terms of layout and content. If we receive any request for clarification on the above from an I&AP we will immediately respond and relay the same message. We will also revisit the SR and ensure clarity in this regard if required.

		10. Guidelines You are advised that when undertaking the Scoping and EIA process, you must take into account the applicable Guidelines, including the Guidelines developed by this Department. This Department's Guidelines can be downloaded from this Department's website. In particular, the Guidelines that may be applicable to the proposed development include, inter alia, the following: 10.1. Guideline for the Review of Specialist Input in the EIA process (June 2005) 10.2. Guideline for Environmental Management Plans (June 2005) 10.3. Guideline on Alternatives (March 2013) 10.4. Guideline on Need and Desirability (March 2013) 10.5. In addition to the above, you must consult the National Biodiversity Offset Guideline (dated 23 June 2023), issued under Section 24J of the NEMA for further details regarding the biodiversity offset requirements. 11. Scoping Report ("SR") Requirements 11.1. The SR must contain all the information outlined in Appendix 2 of the EIA Regulations, 2014 (as amended) and must also include the information requested in this letter. Failure to submit any information prescribed in Appendix 2 of the EIA Regulations, 2014 (as amended) may result in the application for Environmental Authorisation being refused. 11.2. In accordance with Regulation 21 of the EIA Regulations, 2014 (as amended), this Directorate hereby stipulates that the final SR must be submitted to this Directorate for decision within 44 days from the date of receipt of the application by this Directorate, as calculated from 23 July 2024. 11.3. If the final SR is not submitted within the prescribed timeframe, the application will lapse in terms of Regulation 45 of the EIA Regulations, 2014 (as amended) and your file will be closed. Should you wish to pursue the application again, a new application process would have to be	10. The requirements 10.1 to 10.5 are noted and will be complied with. 11. 11.1. The requirement is noted and will be complied with. 11.2. The requirement is noted and will be complied with. Planned submission date of the final SR is 6 September 2024. 11.3. The comment is noted.

		initiated. A new Application Form would have to be submitted and the prescribed application fee would have to be paid. 12. Plan of Study ("PoS") Requirements A PoS for EIA, which sets out the approach to the EIA in accordance with Appendix 2 of the EIA Regulations, 2014 (as amended), must be compiled and submitted together with the SR. The Environmental Assessment Practitioner ("EAP") must also ensure that the aspects indicated in the PoS and which will be assessed by specialists are representative of the issues and concerns raised by Interested and Affected Parties ("I&APs") during the scoping process. 13. Exemptions This Directorate notes that you do not intend to apply for exemption from any of the requirements of the Public Participation Process, as stipulated by Regulation 41, from any other provisions contained in the EIA Regulations, 2014 (as amended) or the NEMA. Please note that should you fail to meet a requirement of the NEMA or the EIA Regulations, 2014 (as amended), and if no exemption from that provision was applied for, your application for Environmental Authorisation may be refused. 14. Public Participation Process ("PPP") 14.1. The SR and PoS and EIA Reports must be subjected to a PPP that complies with Chapter 6 of the EIA Regulations, 2014 (as amended) and must take into account any applicable Guidelines published in terms of Section 24J of the NEMA, this Department's Circular EADP 0028/2014 on the "One Environmental Management System" and the EIA Regulations, 2014 (as amended), as well as any other guidelines developed by this Department. Note that the public participation requirements are applicable to all proposed sites. 14.2. In addition to the above, the EAP must submit one electronic copy of the SR and PoS to this Directorate for a minimum commenting period of thirty (30) days. The SR and PoS must be made available to all relevant State Departments and/or Organs of State that administer laws relating to a matter affecting the environment, for a minimum commenting period of thirty (30) days.	12. The POS is included as Section 11 of the Scoping report. 13. The comment is noted. No exemptions were applied for. 14. 14.1. The requirement is noted and will be complied with. The SR and POS PPP was from 24 July up to and inclusive of 26 August 2024, with all requirements in terms of the Guideline on PPP, The EIA Regs, the Department's Circular EADP 0028/2014 on the "One Environmental Management System" complied with. 14.2. The EAP submitted the electronic copy of the SR, POS and all supporting documentation to the Directorate on 23 July 2024 for a 30-day commenting period up to and inclusive of 26 August 2024. The SR, POS and all supporting documentation was also made available to all relevant organs of state for the same commenting period.

		14.3. This Directorate herewith further provides the following comments: 14.3.1. Your attention is drawn to Circular 0027 of 2021 regarding the electronic administration of EIA applications. The Directorate: Development Management (Region 1 and 2) will continue with the electronic submission of correspondence and has for this reason established a dedicated e-mail address for the submission of all correspondence to the Directorates. For the Cape Town office, the e-mail address is DEADPEIAAdmin@westerncape.gov.za. 14.3.2. This new electronic means of working is effective from 1 February 2022 and all general EIA queries, correspondence, applications, non-applications and reports must be e-mailed to the aforementioned email address. 14.3.3. Please ensure that where electronic copies cannot be accessed by Interested and Affected Parties ("I&APs"), alternative access to copies of the Reports are made available. 14.3.4. E-mail notification to I&APs is strongly supported. However, other means of notification for those I&APs will be required, where no e-mail addresses are available, or where the likelihood of success of this electronic correspondence is expected to be low. 14.3.5. Where I&APs are unable to access electronic copies of the reports, a hard copy of the report must be made available. Alternatively, the EAP will be required to engage with I&APs, with respect to alternative methods of accessing electronic copies of the Reports. 14.3.6. It is hereby requested that documents be submitted in pdf. format and not as scanned, as far as possible. Documents should also be saved as separate documents, as opposed one consolidated pdf. document being submitted. 14.4. The EAP must notify this Directorate in writing of the date the SR and PoS and EIA Reports were submitted to the relevant State Departments and/or Organs of State and clearly indicate whether such State	14.3. 14.3.1. The comment is noted, and this email address was used by the EAP for submission. 14.3.2. The requirement is noted and will be complied with. 14.3.3. The requirement is noted. A hard copy of the SR, POS, WULA and supporting documentation was placed at the Fisantekraal library for the 30-day commenting period. 14.3.4. Registered I&APs that provided e-mail addresses were notified by email, and where no email addresses were available and cellular numbers were provided, a sms was sent to each registered I&AP. Site notices were also placed at the site and in the Fisantekraal library. An advert was also placed in the Tygerburger. 14.3.5. A hard copy of the SR, POS, WULA and supporting documentation was placed at the Fisantekraal library for the 30-day commenting period. 14.3.6. All documents were submitted as pdf and compressed where possible to decrease the file size. Each Appendix to the SR, the SR and the BID were saved as separate documents. 14.4. The SR and POS were submitted for comment to relevant State Departments, and they were notified of the commenting period as required by Section24O of the NEMA.

		Departments and/or Organs of State were notified of the commenting period in terms of Section 24O of the NEMA. 14.5. It is imperative that State Departments and/or Organs of State be in possession of the Reports when the EAP issues them with the notice in terms of Section 24O of the NEMA. Please note that the EAP is responsible for such consultation. Therefore, it is requested that the EAP include proof of such notification to the relevant State Departments and/or Organs of State in terms of Section 24O(2) and (3) of the NEMA in the SR and EIA Reports, where appropriate. 14.6. In terms of good environmental practice, you are encouraged to engage with State Departments and/or Organs of State early in the EIA process to solicit their inputs on any of their requirements to be addressed in the EIA process. Please note that this does not replace the requirement of making the SR and PoS and EIA Reports available to State Departments and/or Organs of State, as stipulated above. The following State Departments and/or Organs of State must be consulted during the application process, as part of the PPP: 14.6.1. CapeNature; 14.6.2. HWC; 14.6.3. City of Cape Town; 14.6.4. Western Cape Government: Infrastructure; 14.6.5. Western Cape Government: Economic Development and Tourism; 14.6.6. Western Cape Government: Department of Agriculture; 14.6.7. This Department's Air Quality Management Directorate; 14.6.8. This Department's Waste Management Directorate; 14.6.9. This Department's Pollution and Chemicals Management Directorate; 14.6.10. National DWS;	14.5. The requirement is noted and will be complied with. The SR and POS were submitted for comment to relevant State Departments, and they were notified of the commenting period as required by Section24O of the NEMA. A download link to the documentation for comment was also provided in the communication. 14.6. The comment is noted. CapeNature, HWC, CoCT, Western Cape Government: Infrastructure, Western Cape Government: Economic Development and Tourism; Western Cape Government: Department of Agriculture; DEA&DP Directorate Air Quality; DEA&DP Directorate Waste Management; DEA&DP Directorate Pollution and Chemicals Management; National DWS; National Department of Agriculture, Land Reform and Rural Development; Eskom; The South African Civil Aviation Authority; The South African National Defence Force; The South African Air Force; The National Airspace Committee are included as I&APs for the proposed project. Engagement has been taking place through meetings, correspondence and direct engagement by specialists.

		14.6.11. National Department of Agriculture, Land Reform and Rural Development; 14.6.12. Eskom; 14.6.13. The South African Civil Aviation Authority; 14.6.14. The South African National Defence Force; 14.6.15. The South African Air Force; and 14.6.16. The National Airspace Committee. 14.7. Further to the above, given the nature and scale of your proposed development, the following authorities must be consulted during the application process, as part of the PPP: 14.7.1. Swartland Municipality; 14.7.2. Cape Winelands District Municipality; and 14.7.3. West Coast District Municipality. 14.8. This Directorate further hereby request that Airports Company South Africa ("ACSA") (Cape Town) similarly be consulted, as part of all PPP undertaken. 14.9. A register of I&APs must be opened and maintained. The said register must be submitted to this Directorate. The EAP must record and respond to all comments received. The comments and responses must be captured in a 'Comments and Responses Report' and must include a description of the PPP followed. This report must be included in the public participation information attached to the final SR and PoS and EIA Reports to be submitted for a decision. 15. Environmental Management Programme ("EMPr") 15.1. In accordance with Section 24N of the NEMA and Regulation 19 of the EIA Regulations, 2014 (as amended), this Directorate hereby requires the submission of an EMPr. The contents of such an EMPr must meet the requirements outlined in Section 24N (2) and (3) of the NEMA (as amended) and Appendix 4 of the EIA Regulations, 2014 (as amended).	14.7. The requirement is noted. Swartland Municipality, Cape Winelands District Municipality, and West Coast District Municipality have been included as I&APs for the proposed project. 14.8. ACSA has been included as I&AP for the proposed project. CWA is also engaging directly with ACSA. 14.9. A register has been opened and is maintained and will be submitted to DEA&DP. All comments received are recorded and responded to in the Comments and Responses report, inclusive of a description of the PPP followed. The C&R will be included in the PPP information that will be submitted with the final SR and EIA reports. 15. 15.1. The requirement is noted and will be complied with.

		15.2. The EMPr must address the potential environmental impacts of the proposed expansion throughout the project life cycle, including an assessment of the effectiveness of monitoring and management arrangements after implementation (auditing). The EMPr must be submitted together with the EIA report. When compiling the EMPr, this Department's Guideline for Environmental Management Plans (June 2005), available on this Department's website, must be taken into account as well as Appendix 4 of the EIA Regulations, 2014 (as amended).	15.2. The requirement is noted and will be complied with.
		16. Alternatives	16.
		16.1. Be advised that in terms of the EIA Regulations, 2014 (as amended) and the NEMA the investigation of alternatives is mandatory. All alternatives identified must therefore be investigated to determine if they are feasible and reasonable. In this regard it must be noted that this Directorate may grant authorisation for an alternative, as if it has been applied for or may grant authorisation in respect of all or part of the activity applied for, as specified in Regulation 20 of the EIA Regulations, 2014 (as amended). Alternatives are not limited to activity alternatives, but include layout alternatives, design, activity, operational and technology alternatives.	16.1. The requirement is noted and will be complied with.
		16.2. You are hereby reminded that it is mandatory to investigate and assess the option of not proceeding with the proposed activity (i.e., the "no-go" option) in addition to other alternatives identified. Every EIA process must therefore identify and investigate alternatives, with feasible and reasonable alternatives to be comparatively assessed. If, however, after having identified and investigated alternatives, no feasible and reasonable alternatives were found, no comparative assessment of alternatives, beyond the comparative assessment of the preferred alternative and the option of not proceeding, is required during the assessment. What would, however, be required in this instance is proof that the investigation was undertaken and motivation indicating that no reasonable or feasible alternatives other than the preferred option and the "no-go" option exist.	16.2. The requirement is noted and will be complied with.
		17. Need and Desirability In terms of the EIA Regulations, 2014 (as amended), when considering an application, this Directorate must take into account a number of specific	17. The requirement is noted and will be complied with.

		considerations including, inter alia, the need for and desirability of any proposed development. As such, the need for and desirability of the proposed activity must be considered and reported on in the SR and PoS and EIA Reports. The SR and PoS and EIA Reports must reflect how the strategic context of the site in relation to the broader surrounding area, has been considered in addressing need and desirability. 18. Collapsing of Scoping and EIA Report Please be advised that the Scoping and EIA Phases of the EIA process are two distinctly separate phases each having its own requirements and reports to be submitted. This Directorate will not accept any SR and PoS and EIA Reports where the process or information of the two phases were collapsed into a single process or report. 19. Mandatory Plan of study for EIA You are hereby reminded that a plan of study for EIA, which sets out the approach to the EIA of the application in accordance with Appendix 2(2)(i) must be compiled and submitted together with the Scoping Report. 20. Project Schedule Your Project Schedule (submitted together with the Application Form), is hereby acknowledged and largely appears in order with regards to the allocated timeframes relevant to your application. Please be reminded to adhere to the legislated timeframes regarding your application submitted in terms of the NEMA and EIA Regulations, 2014 (as amended). 21. NEMA Principles In addition to the above, you must clearly show how the proposed development complies with the principles contained in Section 2 of the NEMA and must also show how the proposed development meets the requirements of sustainable development. 22. Social and Gender Considerations You are reminded that the social context of the proposed development must always be considered. This includes the impact that the development proposal may have on the prevalence of	18. The comment is noted. 19. The requirement is noted and will be complied with. 20. The comment is noted. 21. The requirement is noted and will be complied with. 22. The requirement is noted and will be complied with. The additional considerations will be included in the Socio-economic Impact Assessment.

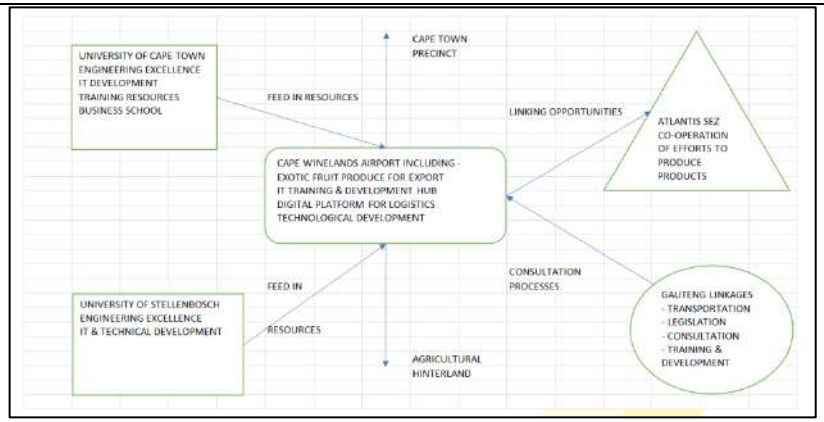
		HIV/AIDS, Sexually Transmitted Infections ("STI") and Tuberculosis ("TB"), as well as equity and gender related concerns. 23. Climate Change 23.1. The SR and PoS and EIA Reports must report on the potential impacts on climate change. One of the objectives of the Western Cape Provincial Spatial Development Framework published by this Department is to minimise the consumption of scarce environmental resources such as water, fuel, building materials, mineral resources, electricity, and land. To this effect and as part of the efforts to reduce the effects of climate change, you must, as part of the EIA process, identify energy efficient technologies that could be implemented for the proposed development. 23.2. Considering that South Africa is a water scarce country and that many catchments in the Western Cape are already water stressed, you must also consider implementing the use of water saving devices and technologies for the proposed development. 24. Kindly quote the abovementioned reference number in any future correspondence in respect of the application. 25. It is prohibited in terms of the NEMA for a person to commence with a Listed Activity unless the Competent Authority has granted an Environmental Authorisation for the undertaking of the activity. A person convicted of an offence in terms of the above is liable for a fine not exceeding R10 000 000 or to imprisonment for a period not exceeding 10 years, or to both such fine and imprisonment. 26. This Directorate reserves the right to revise or withdraw its comments and request further information from you based on any information received.	23. 23.1. The POS for the Climate Change Impact Assessment has been included with the SR along with additional information on Climate Change in sections 5.3, 9.13 and 11.4.12 of the SR. Energy efficient technology is being investigated as part of the EIA process. 23.2. Water saving, reuse and recycling initiatives form part of the proposed project and will be included in the SR, WULA and EIA reports. 24. The requirement is noted and will be complied with. 25. The comment is noted 26. The comment is noted.
199	Dinah Gibbon - Africana Engineering (Pty) Ltd	*Email dated 5 August 2024:* 1. Please have a look at the attached proposal and related docs for commentary. Look forward to hearing from you soon. *The following documents were shared and have been included as Appendix B (C199):* • *Dube-External-Newsletter-Q4-2024.pdf* • *Dubetradeport-Spike-Airfreight-volumes.pdf*	*Email response provided 5 August 2024:* 1. Thank you for the email and the WhatsApp sent. You will be registered as an I&AP for the proposed project and your submission captured.

		• *IPAP2014.pdf* • *Newly-launched-Dube-TradeZone-2-attracts-R1.8-billion-in-early-investment.pdf* • *Policy_SEZ.pdf* • *SEZ-brochure_2021.pdf*	
200	Dinah and Guy Gibbon - Africana Engineering (Pty) Ltd	*Email dated 5 August 2024:* 1. Ditto [Refer comment no 199, additional attachments were provided] *The following documents were shared and have been included as Appendix C (C200):* • *Gibbon-TPC7a-PAPER ACCEPTANCE SAEEC2011* • *EIA Delta* • *Energy Efficiency Paper* • *Draft Environmental Impact Assessment Report- proposed Dube Tradeport Trade Zone 2 located between Tongaat and the King Shaka International Airport in Kwazulu-Natal* • *Africana Engineering - CWA proposal [the content of this letter is provided below]* *Letter received via email on the 5th of August 2024:* 1. We have been noticing with interest the establishment of a second airport in CT precinct having been through similar process with KSIA from about year 2000 to the official handover in 2010. At the time I was working for Palace Consulting Engineers in Durban involved first with Moses Mabhida Stadium which was a challenge to design continuous power supply before being involved with Ilembe Consortium in the design, construction and final handover of KSIA. Unfortunately, my involvement with KSIA and Dube Trade port was cut short due to expediency in completion of the Foskor Mining South Pit Project from 2008 – 2010 then with EML/EIS Zambia. 2. Suffice to say regarding KSIA it interesting that there was a pic of the then Ben Schoeman former transport minister around 1973 riding in his wheel chair on	*Email response provided 5 August 2024:* 1. Thank you for the email and the WhatsApp sent. You will be registered as an I&AP for the proposed project and your submission captured. *EAP Response:* 1. This comment is noted.

		the old La Mercy runway which ran for 30 odd years serving microlights before the EIA process began in earnest. Myself, with Wally Meyer & June Viljoen commenced with petitioning for the new airport proposal around 2003 managing to get local Durban council approval around the same time so that the EIA could get underway. Actually, the biggest hurdle thereafter besides the famous barn swallow story was convincing ACSA. The cost and the move from Durban South to Durban North was prohibitive. However, through much local govt participation and the fact that the Reunion airport was confined between the Mondi channel in the north and Toyota Prospecton site in the south entailed a problem with any runway extension to handle large body aircraft. 3. Eventually the EIA process got underway around 2004-2005 while I worked for a company called Tank from CT selling cable accessories. Incidentally, all my colleagues at the time people from Siemens etc. categorially said the new airport will never happen? 30 years is a long time but once the "parts" fall into place it is just a matter of getting likeminded people to participate much like CWA? I attended a number of EIA sessions from La Mercy to Ballito to mt Edgecombe and recall one objection such as "aircraft noise pollution while playing golf? Eventually I think most of the people in the north welcomed the airport as not having so far to travel? The story of the barn swallows were particularly interesting as these birds in their millions migrate between the UK and SA very year and the engineers used a radar system to detect their presence early in the mornings and late evenings when they roost in the Mt Moreland area south of the proposed runway. This was one of the last objections we addressed with technology which is interesting and is addressed later in my commentary. INTRODUCTION 4. Around 2010 I completed my time at Foskor with the successful operation of south pit and overland conveyor – see my paper to SAEEC2011 attached around R630m later! I took up an appointment in Zambia and we successfully completed PFC – power factor correction installations for most of the country as Zesco imposed surcharges on poor power factor industries. We also built 2*50MW HFO Warsila power stations in Ndola to handle Zambia's power shortfall particularly as of now with El Nino – encountering one of the country worst drought phenomena. While addressing the power shortage myself with	2. This comment is noted. 3. This comment is noted. 4. This comment is noted.

		Zutari handled much of the COC – certificates of compliance following the successful EIA process of the Delta/Gulfstream project. Anyway, long story short when I read of the pending CWA project, I had to make some contribution in the prospect of being involved with the project. COMMENTARY 5. Having been through the EIA process for KSIA and Dube Trade Port I would like to offer the following: 5.1. I notice very limited airport diversification perhaps chicken farming and biodiversity? 5.2. Perhaps there is a need to diversify somewhat to counter the proximity of CTIA? 5.3. I am aware there is Atlantis EPZ is not too far away would not want to compete directly. 5.4. My thinking is considering unrelated items to include in the CWA project such as high valued agricultural goods such as wine, exotic fruits and produce with high technology process to market – something similar to the lessons learnt at KSIA –ULD's and Capespan PCL. 5.5. On another wicket consider IT related developments inclusive of training in IT Digital related technologies. Much like IT University – Belgium University campus in Tswane. 5.6. I believe these two situated not far from renowned universities of CT and Stellenbosch can also benefit from technological developments emanating from these institutions. 5.7. These opportunities should not result in too much land required and scares resources. 5.8. I have included some appendices on SEZ details and benefits for the stakeholders.	5. 5.1. The chicken farming is an adjacent landuse by adjacent landowners and does not relate to the operations of CWA. Biodiversity and impacts on it are assessed as part of the EIA process for the proposed project. 5.2. The comment is noted. 5.3. The comment is noted. 5.4. The comment is noted. 5.5. CWA has developed a comprehensive IT strategy that will include IT digital related technologies. Engagements with surrounding universities form part of CWA's stakeholder engagement plan. The objective being to identify areas of collaboration. 5.6. CWA has developed a comprehensive IT strategy that will include IT digital related technologies. Engagements with surrounding universities form part of CWA's stakeholder engagement plan. The objective being to identify areas of collaboration. 5.7. The comment is noted. 5.8. The comment is noted.

		5.9. I believe it would be beneficial to add some more interest to the airport precinct and deviate from being solely in competition with CTIA. 5.10. Remember too the area I believe is much more conducive to CTIA in creating a people development area which the former is unable to achieve. That being its opportunity to rise! PROPOSAL 6. As per attached I have set up a new business around 2021/22 – Africana Engineering (Pty) Ltd with some like-minded colleagues now established in Zambia with all the project portfolios as per our co profile & website and am busy building an official residence in Knysna to be in close proximity to CT. By the way I spent most of my school days in CT then at UCT before progressing to Durban. My goal now is move back into SA with the latest GNU as I believe now it the right time to move forward much like we did prior to the FWC 2010! Opportunity is now there and we have like-minded people in government to assist with the process of getting CWA and surrounding precinct off the ground! Remember us ex-pats made sure we had enough votes to make the changes! 7. PROPOSED BLOCK DIAGRAM OF OPERATIONAL LINKAGES	5.9. CWA will not be solely in competition with CTIA. As a second airport in Cape Town, CWA will play a significant complementary role to CTIA by offering airport redundancy in Cape Town, contributing to the growth of the air traffic into the region and stimulating additional economic growth and development. CWA will also be the planning alternate (diversion airport) for CTIA. This will yield tremendous benefits to the airline industry e.g. operational cost reductions, carbon emission reductions, increased fuel efficiencies and additional revenue opportunities. 5.10. Socio economic development is a key priority for CWA and forms part of CWA's overall sustainability framework. 6. This comment is noted. 7. The proposed operational linkages are noted.

		 CONCLUSION 8. We are prepared to offer our service to explore and make contact with the relevant authorities within CWA Aero and other corporate bodies to investigate and appoint people to establish or position the company in reaching its near term to long term objectives to make CWA a success. Should you or CWA Aero require our service we will make them available for you so we can explore and appoint the right people to make these issues listed above a reality.	8. Thank you for taking the time to provide comments. Please make use of the CWA website to register as a proposed supplier.
201	Dinah and Guy Gibbon - Africana Engineering (Pty) Ltd	*Email dated 5 August 2024:* 1. Ditto [Refer comment no 199, additional attachments were provided] *The following documents were shared and have been included as Appendix D (C201):* • *Africana Engineering - Company Profile*	*Email response provided 5 August 2024:* 1. Thank you for this second email and the whatsapp sent. You will be registered as an I&AP for the proposed project and your submission captured.
WA 1	Dinah Gibbon - Africana Engineering (Pty) Ltd	*WhatsApp received on 5 August 2024:* 1. Hi it was comments on EIA process should be about 11 attachments in total thanks 2. Okay, let me know if any gaps? Thanks	*WhatsApp response provided 5 & 6 August 2024:* 1. Thank you for the reply, will make sure to capture those. 2. Thank you for all the submissions. They have been acknowledged via email and captured.

202	M.J. de Wit-Signal Gun	*Email dated 6 August 2024:* 1. Please register as a interested & affected party. Please see my contact details below.	*Email response provided 6 August 2024:* 1. We will register you as an I&AP for the project: Proposed Expansion of Cape Winelands Airport.
203	Pamela Madondo - SACAA	*Email dated 6 August 2024:* 1. Kindly find attached comments from the South African Civil Aviation Authority for the proposed expansion of the Cape Winelands Airport. *Letter received via email on 6 August 2024:* 1. We acknowledge receipt of email dated 07 November 2023. The South African Civil Aviation Authority (CAA) is an agency of the Department of Transport (DoT). The Civil Aviation Act 13 of 2009 provides for the establishment of the CAA as a stand-alone authority mandated with controlling, promoting, regulating, supporting, developing, enforcing and continuously improving levels of safety and security throughout the civil aviation industry. The CAA exercises this mandate through the Civil Aviation Regulations (CARs). 2. The screening tools indicates that the proposed development has high sensitivity toward civil aviation which may have major/negative impacts to aviation infrastructure and activities within the airport. 3. Please see our comments below: 3.1. Biodiversity impacts It must be noted that in future aircraft movement and operation will have an impact on birds and/or wildlife can augment the number of aircraft bird/wildlife strikes. Under the CARs the holder of the aerodrome license must assign trained personnel accountable for developing and implementing the bird/wildlife strike prevention programme (CAR Part 139.02.19) 3.2. Maintenance programme	1. This comment is noted. *EAP Response:* 1. This comment is noted. 2. The observation is acknowledged. 3. 3.1. The comment is noted. CWA will be implementing a bird/wildlife strike prevention programme. A specialist was appointed to advise on this as well. 3.2. The comment is noted. CWA will be implementing a comprehensive maintenance programme to ensure that ensure that the surfaces of

		In future the aerodrome license holder must ensure that the surfaces of all movement areas including pavements with runways, taxiways, and aprons and adjacent areas are inspected and their conditions monitored regularly as part of an aerodrome preventive and corrective maintenance programme (CAR Part 139.02.23) 3.3. Projected Future Aircraft Noise/ Emissions Complaints In must be noted that the increase capacity of aircraft movement may result in noise complaints from residents who will be residing in close proximity to the proposed site. Under the CARs, the holder of an aerodrome license must be responsible for handling aircraft noise complaints related to the aerodrome (CAR Part 139.02.23) 4. Please do not hesitate to contact our office for any clarifications.	all movement areas including pavements with runways, taxiways, and aprons and adjacent areas are inspected and its conditions monitored regularly as part of CWA's aerodrome preventive and corrective maintenance programme. 3.3. A noise impact assessment is conducted to understand the potential noise impacts. CWA is committed to implementing a noise monitoring programme. This will include dealing with the handling of aircraft noise complaints related to CWA.
204	Frans van der Walt - **QS2000 Plus (Quantity Surveyors & Project Managers)**	*Email dated 8 August 2024:* 1. Please could you register me as Interested and Affected Party to the EIA process for the Airport. Looking forward to hearing more about the process and project.	*Email response provided 8 August 2024:* 1. Thank you for your email You will be registered as I&AP for the proposed project.
205	Carl Lourenz Naidoo	*Email dated 8 August 2024:* 1. Hope all is well My wife and I would like to register to give input on the environmental impact concerns of the new Cape Winelands Airport development. Please would you let us know how we can go about getting involved in the public feedback.	*Email response provided 12 August 2024:* 1. Thank you for your email. You will be registered as I&AP for the proposed project. Please refer to the in-process Scoping report and attachments available on our website at link https://phsconsulting.co.za/proposed-expansion-of-cape-winelands-airport/ for information on the project. The document titled "CWA Background information and how to comment" provides detail on how to provide comment on the proposed project. Please note the comment period closes COB 26 August 2024.

206	Monique Pierce – **Local Resident**	*Email dated 9 August 2024:* 1. We are home owners in Mikpunt, Klipheuwel - and as such an "interested and affected" party in the CWA project. Looking at the documentation and the land area that this project will encompass, it is clear that it is in extremely close proximity to our community of smallholdings. Mikpunt is a peaceful rural area, where people enjoy country life away from traffic. An airport such as the CWA will have an extreme negative impact on every resident here in as far as environmental factors and quality of life goes. The noise from the air traffic will cause constant stress to animals and people alike, it will disrupt our ecosystems, not to mention the devaluation of property prices because nobody who wants a rural lifestyle such as this wants to live near an airport. It means more people, more cars, more trucks, which equals more noise, and with all of that also more crime. Durbanville and surrounds are already burdened by a criminal element that sprouts from Fisantekraal and Klipheuwel, which is drawing more criminal elements from further away with every passing year. More cars and more trucks mean more road congestion. This project will forever change this community's quality of life, and not necessarily for the better. No amount of impact studies will change this.	*Email response provided 12 August 2024:* 1. Thank you for your email. We take note of and will record your comments and will register you as an I&AP for the proposed project. *EAP Response:* 1. The Scoping and EIA process identifies potential impacts from the proposed project, assesses the anticipated impacts and proposes mitigation. The proposed project is currently in the in-process Scoping Phase, and includes a Socio-Economic Impact Assessment, a Traffic Impact Assessment, a Noise Impact Assessment, Freshwater Ecological Impact Assessment, Faunal and Avifaunal Impact Assessment. Therefore, the impacts mentioned will be assessed in the EIA Report.
207	Mark Bellingan - **Parasky aerial work**	*Email dated 9 August 2024:* 1. This is an integral part of general aviation and your proposal will be not only in the way but will affect many aspects of current aviation in a negative way. I am opposed to this project	Email response provided 12 August 2024: 1. Thank you for your email. Your comments are noted, and you will be registered as an I&AP for the proposed project. CWA Response: Thank you for your email dated 9 August 2024. Please be assured that the CWA development team is committed to thoroughly assessing all potential effects on current aviation activities. Our goal is to integrate the needs of the general aviation community into the project design to minimize

			disruptions and ensure that the project supports the broader aviation ecosystem. As described in the National Airspace Masterplan (NAMP), airspace is considered a national asset. The design and use of airspace are guided by an integrated approach that seeks to combine the different airspace requirements of various users in a manner that satisfies their diverse needs. We are following the ICAO Document 9992 airspace change process, which allows for the careful consideration of all stakeholders' rights and responsibilities. This process ensures that the needs and concerns of general aviation operators like Parasky Aerial Work are fully observed and addressed. Your feedback is valuable, and we will continue to engage with you and other stakeholders to address concerns and find ways to mitigate any potential negative impacts of the project. We would love to schedule a meeting with you to dive into the ICAO Document 9992 process and explore how Parasky can actively participate in shaping this exciting development. Your insights are invaluable, and this is a fantastic opportunity for Parasky to help influence the future of the CWA project. Let's collaborate to ensure your needs and the broader general aviation community are fully represented. Thank you for taking the time to share your views.
208	Ziandikbek	*Email dated 9 August 2024:* 1. My concerns with the development is as follows: - morningstar airport is almost completely left out of this report even though they are as large as fash opperations wise and a destination for rotax maintenance. - -"Stellenbosch is a small VFR airfield. Which can only be used by club members" this is a blatant lie as the airfield is used by everybody no membership is required. - Their is no clear indication of how the vfr trafic would be affected with the change of use at Fawn specificly from Fash to fad69 and from famorning to fad 69 for the training/ recreational flights.	*Email response provided 12 August 2024:* 1. Thank you for the email. Your comments will be recorded, and you will be registered as an I&AP for the proposed project. CWA Response: We acknowledge receipt of your comment dated 9 August 2024, and appreciate the information regarding the flying activities and related structures at Morningstar, and Stellenbosch and the expected impact on VFR Traffic, as included for the Airspace Concept of Operations (Conops) report associated with the Cape Winelands Airport (CWA) Environmental Impact Assessment (EIA). We understand the concerns raised about the Conops report in addressing the General Aviation (GA) activities in the vicinity of the proposed airport,

		Thanks for hearing our concerns.	specifically the omission of Morningstar and Stellenbosch as significant sources of GA traffic. The Cape Winelands Airport airspace design and change process is being conducted in strict accordance with ICAO Document 9992. This ensures that all rights and responsibilities of affected role players are fully observed, providing a structured and transparent approach to the airspace change process. We will gladly share the ICAO methodology with you. **Inclusion of Morningstar Airport in the Report** We acknowledge your concern regarding the omission of Morningstar Airport from the report. Morningstar's significance, particularly in terms of its operational scale and role as a destination for maintenance, has been noted. A reassessment of the airspace and traffic considerations will include a more detailed evaluation of Morningstar Airport's operations. This will ensure that all relevant aspects of General Aviation (GA) activity, including Morningstar, are comprehensively addressed in the final report. **Clarification on Stellenbosch Airfield Usage** We regret any possible confusion caused by the statement regarding Stellenbosch Airfield (FASH). You are correct that FASH is not restricted to club members only and is open to all aviators who wish to use the facility. This will be accurately reflected to highlight the accessibility and operational status of Stellenbosch Airfield. **Impact on VFR Traffic** Your concern about the impact of the airspace change on VFR traffic, particularly for training and recreational flights between FASH (Stellenbosch), FAWN, FAD69, and Morningstar, is valid. The EIA process is considering the potential impacts on VFR operations. We are following the ICAO Document 9992 airspace change process, which includes a comprehensive assessment of traffic volumes, nature of operations and how these changes may affect VFR traffic. This ensures that all rights and responsibilities of affected role players are fully observed. A detailed analysis of VFR routing and how it will be managed under the new airspace structure will be included in the final report.

			Thank you again for your valuable input. We are committed to ensuring that the CWA development takes into account all stakeholder concerns and results in a safe and efficient airspace design. We remain committed to an open and transparent process where the concerns and interest of all stakeholders are observed.
209 & 234	Basil Kilian - **Bk Airport Services**	*Email dated 12 August 2024:* 1. Thanks I have received your email. I will take a look at the documents and revert to you.	*Email response provided 12 August 2024:* 1. Thank you for the confirmation Basil
		Email dated 26 August 2024: 1. With regards to your Report on the Scoping and EIA of Cape Winelands. Thanks for all the updated information you have made available to everybody. I have gone through the areas that I am interested in and have ended up with only one question. I did not see any preliminary Noise contours that could have been plotted from the Baseline Noise readings. Have I missed something or misinterpreting some data? Please advise. Thanks. *Email reply dated 26 August 2024:* 2. Thanks Amanda	*Email response dated 26 August 2024:* 1. Thank you for the email. The proposed project is currently in the in-process Scoping Phase. The Noise Impact Assessment with associated noise contours will be available to all registered I&APs during the Impact Assessment Phase for comment, and as a registered I&AP you will be notified when this period starts.
210	Barbara Gale - **Local Resident**	*Email dated 13 August 2024:* 1. As a registered I&AP for this project I would like to know why I did not receive notification of the Draft Scoping Report and Public Participation Process for which comment is due on 26 August? *Email reply provided 13 August 2024:*	*Email response provided 13 August 2024:* 1. Thank you for your email. You were sent a notification email at 13:59 on 23 July 2024 (please see proof attached). Please let me know if you would like me to resend the email to you.

		1. Dearest Gmail sent it to Spam. I have rescued it and have everything I need. Thank you, so sorry for any inconvenience caused.	
211	Timothy Irvine - **Morningstar Flying Club**	*Email dated 13 August 2024:* 1. Please find comment and input from Morningstar Flying Club attached. Could you kindly confirm receipt. *Letter received via email on 13 August 2024:* 1. We refer to your email dated 23 July 2024 and more particularly the Appendix 19 Airspace Conops report that has been made available. We refer further to our letter dated 7 December 2023 when the club notified you of our interest as an interested and affected party. The Morningstar Flyers Association NPC (reg no. 2014/267363/08) is the non profit organization more commonly known as the Morningstar Flying Club. In that letter we advised that we have in excess of 500 members and were particularly interested in safe appropriate passage from Morningstar to the East of Cape Winelands. This letter raises concerns relating to the Airspace Conops report. Due to the absence of relevant information in the report, these comments cannot be viewed as complete or exhaustive and we reserve the right to comment more fully as and when relevant information is made available. The Conops report does not address the original concerns raised when we noted that we are an interested and affected party. We believe the Conops report is materially deficient in a number of respects. Valid and considered outcomes cannot be derived from the report. The report in its current form is likely to create an unsafe environment. 2. **Identification of Morningstar as a significant source of GA traffic**.	*Email response provided 13 August 2024:* 1. Thank you for your comments and I confirm receipt of your email CWA Response to letter: 1. CWA acknowledges receipt of your letter dated 13 August 2024, and appreciate the detailed information regarding the flying activities and related structures at Morningstar as included for the Airspace Concept of Operations (Conops) report associated with the Cape Winelands Airport (CWA) Environmental Impact Assessment (EIA). CWA understands the concerns raised about the Conops report in addressing the General Aviation (GA) activities in the vicinity of the proposed airport, specifically the omission of Morningstar as a significant source of GA traffic. Your emphasis on the volume of activity at Morningstar and its potential impact on the safety and efficiency of airspace management is fully noted and will be addressed during the stakeholder engagement process that we have embarked upon. The Cape Winelands Airport airspace design and change process is being conducted in strict accordance with ICAO Document 9992. This ensures that all rights and responsibilities of affected role players are fully observed, providing a structured and transparent approach to the airspace change process. **2. Morningstar's Role as a GA Activity Hub**

		It is noted that Stellenbosch and Ysterplaat have been specifically identified in the report. Morningstar has not been identified as a place of significant GA activity, which it is. It is classified in the general classification of 'minor airfields' and in the context, this is not factually correct. It is highly likely to be the busiest GA airfield within the identified radius. To ensure all relevant considerations are taken into account the report requires a full and detailed assessment of surrounding GA activities. It is highly likely that Morningstar has more GA activity than Stellenbosch and more activity than Ysterplaat, yet unlike the other two airfields, Morningstar is not identified as material and is therefore not properly considered in the report. Subject to a proper assessment being undertaken, it will be noted; - Morningstar has in excess of 500 active members. - It has two active training schools. - It is the same distance from Cape Winelands (13NM) as Ysterplaat and Stellenbosch. - The airfield has 89 hangars with another 12 in the process of being constructed. - It houses in excess of 230 light aircraft. - It has a significant number of aircraft movements. The size of the general aviation (GA) community at Morningstar warrants that the GA activity that is generated from this airfield should be given due consideration. 3. **Insufficient to no information on GA activity.** We are concerned that the report does not sufficiently detail the significant amount of GA activity that operates within the affected area, and much of it is from Morningstar. With no accurate assessment of the GA activity no valid and safe assessment can be made of the impact of proposed changes. This material deficiency in the report means that any conclusions or finding derived from this report are likely to be inaccurate and based off insufficient information to be able to make appropriate and safe recommendations.	We appreciate the detailed statistics provided on Morningstar's activity, including the number of active members, aircraft, hangars, and training schools. We will ensure a reassessment of the GA activity at Morningstar, and a more comprehensive analysis will be conducted to accurately reflect its significance. **3. Inclusion of GA Activity Data** Your concern about the insufficient information on GA activity within the report is valid. We will work to gather more detailed data on GA operations within the affected airspace, particularly from Morningstar, to ensure that the safety and operational considerations are based on accurate and comprehensive information. This will include a thorough risk assessment of the GA activities and their interaction with the proposed controlled airspace.

		4. **Consideration of VFR Traffic** The report refers to VFR traffic corridors and consideration of VFR traffic routes which "may" be developed. The report does state, "VFR traffic in the area must be considered as it plays an important role in the safety of flight operations. This includes the consideration that some of the traffic will be training flights by unexperienced pilots." The report identifies the issue, which is a clear and obvious safety concern to not only GA traffic but also to scheduled traffic operating within the new proposed airspace. Having identified the risk, the report does nothing to address it. - By not knowing the size of the GA community and traffic it cannot address the issue as no appropriate risk assessment can be made and valid safe conclusions reached. - By increasing controlled airspaces with admittedly non professional and student pilots operating in the immediate area, a hazard is being created. This is a significant safety concern which is not addressed. - There is reference to GA traffic on the east going to the GA area. The extent of the traffic routing from the West to the East and vis versa is not identified or addressed. - The approach of the report to the creation of new controlled airspaces appears to be that the IFR routing are being established first and only then VFR traffic routes "may" be considered. - To be truly safe and duly considered it is our contention that VFR routes need to be fully considered at the same time as the IFR routes. The GA traffic is present, is material and needs to be fully identified and considered at inception. - In the absence of due consideration having being given by the report we remain concerned that around the edges of controlled airspace and on VFR passages, if indeed created, they may be narrow and constricted and create congestion points with non - sophisticated aircraft, with the bare minimum of instrumentation, piloted by non-professional pilots and student pilots. The report does not fully identify, quantify or appreciate the risks that have been created by the creation of new and adapted airspaces.	**4. Consideration of VFR Traffic** The importance of considering Visual Flight Rules (VFR) traffic, especially for training flights by less experienced pilots, is acknowledged. We agree that VFR routes should be carefully planned alongside Instrument Flight Rules (IFR) routes to prevent congestion and ensure safety. The report will be revised to include a more detailed analysis of VFR traffic, with specific attention to the routing between the West and East of the proposed airspace, as well as the potential hazards around controlled airspace boundaries.

		5. Kindly acknowledge receipt of our comment and advise of the future steps in the process enabling us to interact accordingly.	5. Gathering Design Requirements for Future Airspace and Flight Operations Cape Winelands Airport (CWA) has embarked on a formal process to gather design requirements for the future airspace and flight operations at CWA. Engagements with affected stakeholders are ongoing to ensure that all concerns are fully understood and the impact of these activities are appropriately considered in future airspace changes. An iterative process of consultation and amendment of design criteria is followed. As you are aware, we have had one engagement already, more engagements will follow until the full ICAO airspace Change process has been concluded. This process includes: • Identification of Morningstar as a Significant Source of GA Traffic: A full and detailed assessment of surrounding GA activities will be conducted to ensure all relevant considerations are taken into account. Traffic volumes to and from Morningstar will be accommodated in the final airspace design. • Comprehensive Traffic Assessment: A study will be conducted to assess the nature of flights, aircraft types, duration of flights, and traffic density associated with Morningstar. The final airspace design will accommodate the target flight density and volume from Morningstar. • Existing Morningstar Concern: Paragraph 6 below lists a current summary of the concerns and proposed actions to appropriately address the various items of concern. As stated above, the list that is provided is part of ongoing discussions, and will be updated as we progress the airspace design project. More information on the process that is followed will be shared during our next face-to-face meeting. Future Steps

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<td>Your ongoing involvement in the process is valued, and we will ensure that all relevant information is shared with you as it becomes available. The next steps will include further engagements to addresses the concerns you have raised, followed by an opportunity for further comment and interaction.

Thank you for your continued engagement in this process. We remain committed to ensuring that the development of the Cape Winelands Airport is conducted with the highest safety standards and in full consideration of all stakeholders.

Summary of existing Morningstar airspace design requirements

<table>
<tr><th>Originator</th><th>Reference</th><th>Concern</th><th>Mitigation</th><th>Design Reference</th><th>Output</th></tr>
<tr><td>Morningstar FC, 09 August 2024</td><td>MS-1</td><td>Identification of Morningstar as a significant source of GA traffic.</td><td>1. To ensure all relevant considerations are taken into account the report requires a full and detailed assessment of surrounding GA activities.
2. Traffic volumes to / from Morningstar to be accommodated</td><td>DR-MS-1</td><td>1. Determine MS associated traffic volumes
2. Ensure that final design can accommodate target volumes at MS</td></tr>
<tr><td></td><td>MS-2</td><td>Insufficient to no information on GA activity</td><td>1. A comprehensive traffic assessment of the GA activity to be conducted. The study is to assess nature of flight, aircraft types, duration of flights, traffic density, etc</td><td>DR-MS-2</td><td>1. Final airspace design to accommodate Morningstar target flight density / volumes</td></tr>
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<tr>
<td>212</td>
<td>Stephen Levetan - ENS Africa</td>
<td>Email dated 13 August 2024:

1. I am in the process of considering some of the plethora of documents made available on your website relating to the DSR phase. My initial observation is that most of the specialist scoping reports remain the same as those furnished in the pre-application phase and only some minor changes were made and the dates changed. Having regard to your responses to my client’s comments on the pre-application DSR and specialist reports, I would have expected to see reference in the updated specialist scoping reports to those comments.

I shall deal with this appropriately in the comments that will be supplied by 26 August.

The purpose of this e-mail is to enquire why the poultry study was not included at this stage. Surely a draft scoping report by the appointed specialist should have been included. Please explain why nothing has been stated or supplied in this regard and also when such report will be made available for public</td>
<td>Email response provided on 14 August 2024:

1. Thank you for your email.

The Plan of Study in the Scoping report identifies the requirement for a Poultry Biosecurity and Health Impact study which will be completed and circulated for comment in the Impact Assessment Phase.

I am looking forward to receiving your comments on the 26th August.</td>
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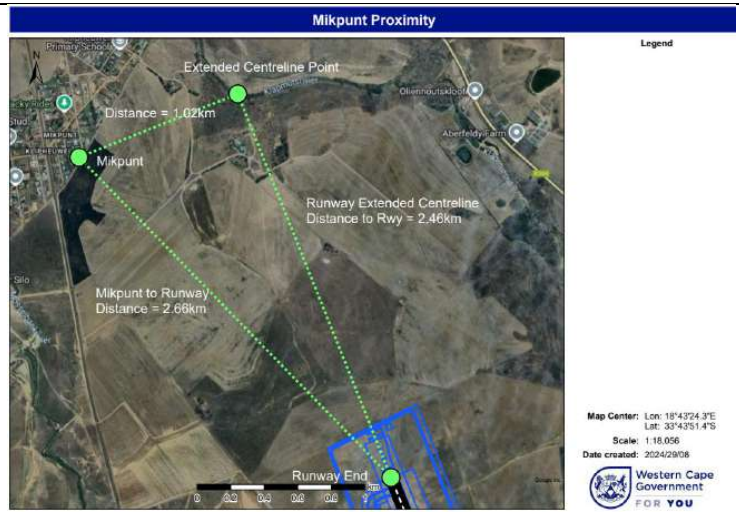
		comment. Here too, I shall deal with this in the comments to be made so that the competent authority can be made aware of this crucial missing study/assessment.	
215	Derek Lord & Rikus Erasmus - **Stellenbosch Flying Club**	*Email dated 19 August 2024:* 1. Thank you for your communication regarding the Proposed Expansion of Cape Winelands Airport and the associated Public Participation Process. We wish to note that, despite the indications as notarised in Appendix E of Appendix 30, the contents of Appendix 19 remain unchanged. We appreciate your attention to this matter and look forward to any necessary clarifications. Furthermore, we want to express our deep commitment to full engagement in the Cape Winelands Airport Task Force (CWATF). We consider our participation crucial and are eager to contribute constructively to the forthcoming discussions. We look forward to the next engagement	*Email response provided by EAP 24 August 2024:* 1. Thank you for the email. The contents thereof are noted and will be recorded. Response by CWA: CWA appreciates your commitment to fully engage on this matter. The initial ConOps (Appendix 19) deliberately focuses on broad concepts rather than specific details to maintain flexibility as the project evolves. This flexibility is vital for adapting to changes and addressing stakeholder concerns, including those related to general aviation, as they arise. Where specific details are not included, it does not signal any intention to abandon or diminish the rights or privileges of stakeholders in the final design process. The ConOps is, however, being evolved over time and will include additional general aviation concerns in the next revision. In parallel and following the ConOps, CWA has embarked on an airspace development process within with the formal National Airspace Committee (NASCOM) channels, where the concerns and user requirements of all aviation stakeholders, including Stellenbosch Flying Club, are being considered. The airspace development process being followed is in fact the internationally recognised and accepted ICAO Document 9992 approach (International Civil Aviation Organisation Manual on the use of Performance Based Navigation in Airspace Design). This ensures that all operational aspects, such as general aviation, are thoughtfully considered. It is noted that further fruitful engagements have taken place between parties, as recently as 23 August 2024.

217	Marriette Kemp - **Local Resident**	*Email dated 19 August 2024:* 1. I am a concerned Uitzicht resident and many of the people in the area and surrounds is against the airport, for legitimate reasons What avenues can we pursue and how many signatures will a petition require to prevent the airport from being build?	*Email response provided 20 August 2024:* 1. Thank you for the email. The proposed project is currently within the in-process Scoping Phase with public participation closing on 26 August 2024. The Scoping report and supporting documentation is available on our website at download link https://phsconsulting.co.za/proposed-expansion-of-cape-winelands-airport/ or in hard copy at the Fisantekraal library. Please direct your comments to me for recording and responses within the Comments and Response report.
218	Janet Matthee - **Local Resident**	*Email dated 20 August 2024:* 1. I am opposed to the new airport in Fisantekraal for the following reasons: • the noise level will increase • the air quality will decrease which will negatively affect the health of the inhabitants of the surrounding area • the traffic will increase which will lead to longer driving time My house is in [redacted]	*Email response provided 20 August 2024:* 1. Thank you for your email. You will be registered as an I&AP for the proposed project and your comments recorded. The mentioned issues will be assessed by specialist reports to be made available in the EIA phase.
219	Jan & Heidi Neethling	*Email dated 22 August 2024:* 1. Please can you register my husband and I as an Interested and affected parties? *Email reply dated 22 August 2024:* 2. Thank you for your confirmation response	*Email response provided on 22 August 2024:* 1. Thank you for the email. You will be registered as I&AP for the proposed project.
220	Ettienne Brunsdon	*Email dated 22 August 2024:* 1. Dear Amanda, please note that I wish to be registered as an interested and affected party on the above project, will you please action accordingly? *Email reply dated 22 August 2024:*	*Email response provided on 22 August 2024:* 1. Thank you for the email. You will be registered as an I&AP for the proposed project.

		2. Thank you very much, Amanda. Enjoy your day then.	
221	Pieter De Villiers	*Email dated 22 August 2024:* 1. I found your details on our community group. We were told that we can register with you should we have any objections to the new airport being built. I have objections. Please ad me to the list of objectors	*Email response provided 22 August 2024:* 1. Thank you for the email. You will be registered as I&AP for the proposed project.
222	Danie Pienaar - **BVi Consulting Engineers**	*Email dated 22 August 2024:* 1. I would like to be registered as an interested and affected party on the Cape Winelands Airport Project	*Email response provided 22 August 2024:* 1. Thank you for the email. You will be registered as an I&AP for the proposed project.
223	Johan Lourens - **Local Resident**	*Email dated 22 August 2024:* 1. Can you please register me as an interested and affected party. My home address is: [redacted]	*Email response provided 22 August 2024:* 1. Thank you for the email. You will be registered as an I&AP for the proposed project.
224	Francois Naude - **Udec Engineering**	*Email dated 22 August 2024:* 1. Please find attached my Comments on the Cape Winelands airport development. Please acknowledge receival of this mail and when feedback to my questions should reach me. Please also furnish me a contact E-mail for Mr Rob Hersov if possible. *Letter received via email dated 22 August 2024:* 1. I would like to comment and be added as a I&AP.	*Email response provided 22 August 2024:* 1. Thank you for your email and attached comments. You will be registered as an I&AP for the proposed project and your comments and responses to your comments will be captured within the Comments and Responses report. I unfortunately do not have contact details for Mr Rob Hersov. *EAP Response to letter:* 1. You have been registered as an I&AP for the proposed project.

		2. My general concerns regarding the above expansion like all others are noise, pollution, congestion and crime. I hope that they will be answered by questions other have asked 3. My specific concerns are that PHS consulting and developers are really trying to tiptoe or not to mention the impact the proposed expansion will have on MIKPUNT. My late participation in the whole airports matter, is that I have only now realised how near to MIKPUNT this expansion will come. I do know where the current Fisantekraal airport (plot) is and have no problem with any activities or expansions taking place there. I do however have a huge problem and concern with the proposed runway extension and additional plots of land acquired to do this. For all developers and professionals involved in this project it should be an absolute no brainer that areas, that will be most affected especially with noise and air quality will be those closest to the end of runways. I'm not a professional but rude measurement and calculation based on your pictures and drawings (which always just ends before MIKPUNT) put MIKPUNT in a direct line with the new proposed runway. The end of runway and nearest residence to my calculations are roughly 2000-2500meter apart. This alignment also put us directly downwind of the airport on prevailing wind directions. Summarised this means that jets will pass directly over MIKPUNT at a very low altitude (120m at on a 3-degree glide slope 2000m from end off runway. It also means that all noise and air pollution from ALL the activities will be carried directly to us on the prevailing wind. 4. From the above I need to ask you the following: 4.1. Have PHS consulting, the developers and all contracted professionals contracted to do all feasibility and environmental studies have realised/or have been briefed, that off all affected areas MIKPUNT will probably be affected the most.	2. The concerns are noted. The EIA process includes the assessment of a Noise Impact Assessment, Air Quality Impact Assessment, Traffic Impact Assessment and Socio- economic Impact assessment, which will be circulated to all registered I&APs during the Impact Assessment commenting period. 3. The concerns are noted. Impacts associated with the proposed project on Mikpunt will be assessed during the Impact Assessment Phase and circulated to all registered I&APs during the Impact Assessment commenting period 4. 4.1 Impacts associated with the proposed project on Mikput will be assessed during the Impact Assessment Phase and circulated to all registered I&APs during the Impact Assessment commenting period. 4.2 CWA response: See image below:

		4.2. Can PHS please confirm on a detailed map with verified distance between end of runway and residences of MIKPUNT and how this compares to the international norm	 It has been confirmed that the distance between the northern runway end and Mikpunt is approximately 2.66km. Mikpunt is also not in the direct approach of the proposed runway, but rather at approximately 23 degrees west of the proposed runway approach. International examples of distance between nearest residence and runway end (approximately): • Cape Town Intl Airport Rwy 01 – 799m • OR Tambo Rwy 21L – 355m • OR Tambo Rwy 21R – 449m • London Heathrow Rwy 27L – 482m • New York JFK Rwy 22L – 1.07km It is clear that Mikpunt is substantially further away from the proposed CWA runway than compared to the above (international norm). It must also be noted that the list of above airports is substantially larger and busier than the proposed CWA, expected to process up to 20x more traffic than CWA in the case of Heathrow.

		4.3. Can PHS please confirm the flight path in relation to MIKPUNT from aircraft either landing or taking off. This must include height above ground and distance to nearest residence	4.3 CWA response: See image above which is an approximation. Neither flight paths nor approach/takeoff slopes have been finalised yet. Assuming a 3-degree glide slope for landings, and assuming that an aircraft will land 200m into the runway, it implies that an aircraft would be 140m above the runway height. Note however, that the runway itself is approximately 32m elevated relative to Mikpunt and thus the aircraft at the point in question would be 172m above the nearest residence. Regarding noise, the resultant impacts are being assessed and will be included in the Environmental Impact Reports.
		4.4. Can PHS please motivate why a public meeting in MIKPUNT have not been organised based on the assumption/fact that this will be the most affected area.	4.4 A public meeting was held at the most central community facility with capacity to host a large crowd in the area. The Fisantekraal Community Hall is accessible to Mikpunt residents who we do understand was present at the 8 May Public Meeting. We are about to enter into the impact phase. During this phase all impacts will be considered and will provide a clear indication of the extent of which communities are and not impacted. It is too early to offer any indication of the extent to which Mikpunt is affected. There are plans for an open public day in November this year, at a venue accessible to Mikpunt residents, where impacts can be further discussed. As a registered I&AP you will receive notice thereof.
		4.5. Based on the noise report on your website the MIKPUNT readings were the lowest of all sites. Can PHS please supply us with the following.	4.5

		4.5.1. The calculated change in DB readings expected when airport is in full operation. This can be based on readings taken from LANSERIA from same distance and directly inline with runway from end (point 2) 4.5.2. Will this db. reading still fall in the rural residential bracket as per your report. 4.5.3. Can your professional report do a study or at least mention the effect prevailing winds have on noise pollution and how this will enhance the noise pollution effect on MIKPUNT 4.6. The air pollution report is very vague. Can PHS do a specific report relating to the air pollution effect it will have on a residence area 2000m, directly inline and downwind of a regional airport as planned. 4.7. Airplane accidents are more prone to happen during or directly after landing or take off. With MIKPUNT being directly inline and 2000m front end off runway we are in direct danger from this. I do not see this point being mentioned at all. 4.8. What alternates have the developers and PHS looked at to minimise the nearness and the direct inline problem MIKPUNT pose to the development. Can the runway angle be altered slightly to miss MIKPUNT. Can the runway be moved over the Fisantekraal road more towards the NI side to even out the distance and affect to acceptable level for both sides.	4.5.1 The Noise Impact assessment with associated Noise Cones will be available to all registered I&APs during the Impact Assessment Phase of the proposed project. 4.5.2 The Noise Impact assessment with associated Noise Cones will be available to all registered I&APs during the Impact Assessment Phase of the proposed project. 4.5.3 The comment is noted, weather patterns are considered in impact models. 4.6 The Baseline Air Quality report is done by an independent specialist company DDA Engineering and according to industry standards. A Air Quality Impact report will be produced to confirm impacts on ambient air quality. 4.7 This comment is noted. CWA Response: The concern about bird strikes above Mikpunt is noted. However, Mikpunt is in fact not in the direct approach path of the proposed runway and thus the risk of bird strikes at or above Mikpunt is extremely unlikely. 4.8 The comment is noted. The placement and orientation of the runway is through detailed design and incorporates various parameters such as temperature, wind direction, topography, required airspace integration, transport infrastructure and airspace exclusion zones. CWA is an existing operational and licensed airport that has been in existence for 80 years, operating at the current site. However the proposed alignment will be use to model noise and air quality impacts.

		4.9. Property values will in general rise with development, but in MIKPUNT's case it might very easily decline. People want to live near the airport but not touching distance from the runway. What guarantees can the developers give MIKPUNT property owners that they will not loose value. Are there steps in place should this happen. 5. Summarised. Most residents including myself, have invested in property in MIKPUNT due to the rural and tranquil lifestyle it offers. Must of us is under no illusion that the city and development will catch up with us due time. I am a frequent flier and would appreciate the convenience it brings. I'm very willing to concede to some added noise, traffic, pollution, crime etch coming with any development. However, I'm NOT willing to go from rural tranquil life to living directly under and very near to and international airport runway. This will not slightly or moderately affect our way of living; it will drastically and completely change it from rural and tranquil to living in the most undesired spot in any city imaginable. 6. I'm opposed to the Airport development due to the reasons and facts above. I'm open to be convinced otherwise with facts and guarantees. 7. I await your prompt response to my questions.	4.9. The concern regarding property values is noted. The Socio-Economic Study are dealing with the impact on property values, this report will be available. 5. The comment is noted. The concerns will be assessed as part of various specialist studies. 6. The comment is noted.
225	Leon Roos	*Email dated 23 August 2024:* 1. I am submitting the same set of comments for this round. *Email reply dated 23 August 2024:* 2. Yes, this is correct.	*Email response provided 23 August 2024:* 1. Thank you for your email. Attached are the previous comments you submitted during the pre-application Scoping Phase. Please confirm that these are the comments you would like to resubmit. *Email response provided 23 August 2024:* 2. Thank you Leon

		Letter received via email on 7 December 2023: **1 Introduction:** This document was prepared by Leon Roos in response to the above public comment on the proposed Cape Winelands Airport. In the pursuit of progress and development, the proposal for the Cape Winelands Airport (CWA) stands as a pivotal juncture, demanding a rigorous and transparent examination. This document serves as a comprehensive evaluation and critique of the reports associated with the proposed airport construction, with a focus on fostering a nuanced understanding of its potential impacts. The proposed CWA development, situated at the intersection of environmental conservation, socioeconomic dynamics, and community well-being, necessitates a meticulous analysis. As an electrical inspector and a qualified master installation electrician, my expertise in ensuring compliance and safety aligns with the need for a thorough scrutiny of the reports' technical intricacies. The critical facets explored herein range from the evaluation of consultant expertise, adherence to international standards, the quality of executive summaries, to the nuanced dimensions of environmental impact and socioeconomic considerations. Each section delves into specific aspects, unravelling both commendable elements and areas that require heightened attention. This introduction sets the stage for a comprehensive evaluation that goes beyond the technicalities, recognizing the interconnectedness of progress, conservation, and community well-being. **2 Evaluation of Expertise** Assessing the expertise of the consultants enlisted in producing the reports is a critical aspect, as it directly influences the credibility and reliability of the findings. The question of who designates these consultants as experts necessitates thorough examination, and the absence of clear accreditation or	*Below is response provided by EAP on original submission during pre-application Scoping phase PPP. Amendments have been underlined.* 1. **Introduction:** The introductory comments are noted. 2. **Evaluation of Expertise** The comment regarding evaluation of expertise is noted. The EIA aims to inform decision-makers of the perceived environmental impacts of the proposed project by providing objective, relevant information concerning the environment. This enables the Competent Authority (DEA&DP) to make an informed decision on the Environmental Application and in the end helps to guide sustainable development.

		representation by the South African National Accreditation System (SANAS) raises noteworthy concerns. The reports indicate that certain consultants were engaged to provide specialized services, ranging from environmental impact assessments to engineering and aviation fuel master planning. However, the reports fall short in delineating the criteria or credentials that qualify these individuals or entities as experts in their respective fields. It is imperative to establish who, within the regulatory framework or project management, affirms the expertise of these consultants. In instances where the reports refer to the consultants as experts without transparently presenting their qualifications, certifications, or relevant experience, a significant gap in accountability arises. The lack of clarity regarding the basis for designating them as experts hampers the ability of stakeholders, including the public, to assess the legitimacy of their contributions. Furthermore, while the noise consultants have a calibration certificate from SANAS, this represents a narrow scope of accreditation. The absence of broader SANAS representation for the other consultants involved in the multidisciplinary assessments is a notable omission. SANAS accreditation is typically associated with rigorous adherence to international standards and best practices, instilling confidence in the competence of accredited entities. To address this, the reports should explicitly outline the qualifications, experience, and certifications of each consultant, elucidating the criteria that deem them experts in their respective domains. Additionally, clarification on the entity or authority endorsing their expertise is crucial for transparency. If SANAS representation is limited to specific consultants, the rationale behind this selectivity should be elucidated to ensure a comprehensive understanding of the overall expertise enlisted for the project. In conclusion, the reports must provide a robust foundation for designating consultants as experts, incorporating transparency and adherence to recognized accreditation standards. This is essential for establishing the legitimacy of their contributions and instilling confidence in the thoroughness and impartiality of the assessments.	Specialists are an integral part of the EIA process and enable the objective assessment of potential impacts by a suitably qualified individual or team. Over and above the required qualifications each specialist should have, there is also the requirement for relevant experience. Specialists in the field of sciences are required to register with SACNASP, which is a body that verifies the applicable specialist's qualifications, experience, and ongoing development through annual reports. The specialist input in a particular project may consist of inter alia and depending on the Scope of Work (SoW), a field study, reasonable opinion, provision of baseline information, impact assessment and detailed modelling where applicable. The DFFE Screening tool lists required specialist input based on the project footprint and description loaded. Further studies can be added, as in the case of this project. Specialist reports must comply with the minimum requirements (either through the DFFE Screening tool protocols or Appendix 6 of the NEMA Regulations), inclusive of qualifications, accreditations, and CV.

		3 Adherence to ISO Standards in Assessments A critical aspect of evaluating the reports lies in scrutinizing the consultants' commitment to adherence to International Organization for Standardization (ISO) standards, which serve as benchmarks for quality, safety, and reliability in various industries. The reports, encompassing diverse assessments ranging from environmental impact to fuel master planning, demand a meticulous examination of whether ISO standards were rigorously applied. ISO standards provide a globally recognized framework that ensures consistency and excellence in methodologies, procedures, and outcomes. However, the reports, on initial examination, exhibit a notable lack of explicit reference to specific ISO standards relevant to each assessment. This absence raises concerns about the comprehensiveness and robustness of the methodologies employed by the consultants. For transparency and the sake of stakeholders relying on these reports, it is imperative that the consultants clearly state the ISO standards used, or justify any decision not to adhere to particular standards. ISO standards are designed to enhance the reliability and comparability of assessments, making their application crucial, especially in projects of significant public interest, such as the construction of a new airport. A thorough evaluation should delve into whether the consultants explicitly detail their alignment with ISO standards in the respective domains covered in the reports. In cases where ISO standards are not applied, the reports must provide a compelling rationale for such deviations. This transparency ensures that stakeholders, including the general public, can gauge the robustness of the assessments and the extent to which internationally accepted best practices were followed. Given the potential impact of the airport construction on the environment, communities, and various facets of daily life, adherence to ISO standards becomes pivotal. It not only safeguards the integrity of the assessments but also enables stakeholders to place explicit trust in the methodologies employed. The absence of clear adherence to ISO standards, as apparent in the reports, poses a significant challenge to the credibility and reliability of the findings and recommendations presented.	3. **Adherence to ISO Standards in Assessments** The comment re ISO standards is noted. The assessment criteria and methodology followed by each specialist is based on technical knowledge, scientific principles, industry best practice and experience. No ISO standards are applicable to the Scoping reports produced by specialists at this stage of the proposed project. As the project proceeds, and the need for compliance to ISO standards become apparent, the requirement will be implemented by the specific specialist.

		4 Executive Summary Quality Across Reports The executive summaries of the reports play a pivotal role as they serve as a gateway for stakeholders, including the general public, to grasp the key findings and recommendations without delving into the extensive details of the entire document. The quality of these summaries is, therefore, a critical factor in ensuring accessibility and transparency. However, an overarching concern emerges when evaluating the executive summaries across the reports associated with the proposed airport construction. The summaries, designed to provide a concise overview, exhibit a consistent pattern of poor quality. They lack the clarity, coherence, and comprehensiveness necessary for effective communication of the assessments' core aspects. A robust executive summary should encapsulate the essence of the reports, presenting key insights, potential impacts, and recommended actions in a manner accessible to a diverse audience. Unfortunately, the executive summaries in question fall short of this expectation. They often use technical jargon without adequate explanation, rendering them incomprehensible to stakeholders who may not possess specialized knowledge in the respective domains. Moreover, the executive summaries frequently lack a cohesive narrative flow, making it challenging for readers to follow the logical progression of the assessments. The absence of a clear and concise articulation of the reports' objectives, methodologies, and principal findings hampers the summaries' effectiveness in serving their intended purpose. To rectify this, it is imperative that the consultants revisit and enhance the executive summaries, aligning them with best practices for clear and impactful communication. This involves presenting information in a manner that is accessible to a broad audience, employing plain language without sacrificing the accuracy of the content. The deficiency in the quality of executive summaries not only obstructs public understanding but also raises concerns about the overall professionalism and attention to detail exercised by the consultants. In the interest of transparency and effective stakeholder engagement, the executive summaries should be	4. **Executive Summary Quality Across Reports** The comment re the poor quality of executive summaries in specialist reports is noted. Where possible technical jargon will be adjusted, and summaries amended. Please note that impacts are assessed as part of the Impact Assessment Phase which is still to follow.

		treated as a priority for improvement, ensuring they fulfill their role as informative and accessible precursors to the detailed reports. **5 Comprehensive Assessment of Environmental Impact** The proposed construction of the airport not only jeopardizes the tranquility of rural living but also poses a significant threat to the diverse wildlife inhabiting the region. Scrutinizing the reports reveals a concerning lack of emphasis on the multifaceted consequences of transforming a pristine rural landscape into an industrialized aviation hub. 5.1 Impact on Rural Living Rural areas are cherished for their peaceful surroundings, tight-knit communities, and a lack of industrial intrusion. The reports, however, fall short in acknowledging the profound implications of introducing an airport into this serene setting. The expected surge in traffic, an inevitable outcome of airport operations, threatens to disrupt the daily lives of rural residents. Roads that were once tranquil will witness congestion, longer commute times, and heightened risks for residents, especially if the existing rural infrastructure is ill-equipped to handle such changes. The potential increase in population density due to airport-related activities raises concerns about elevated living costs for rural families. The heightened demand for housing, coupled with a potential uptick in property taxes, could introduce economic challenges for existing residents. 5.2 Impact on Wildlife The rural landscape targeted for the airport likely sustains a rich array of wildlife, from diverse bird species to mammals and other fauna.	5. **Comprehensive Assessment of Environmental Impact** The comment is noted. The biophysical specialist studies for the proposed project include Faunal, Avifaunal, Botanical, Freshwater Ecological Impact Assessments. Also included is a Noise Impact Assessment, Transport Impact Assessment, Socio-economic Impact Assessment, and an Air-Quality Impact Assessment amongst others. Please refer to the Scoping report (section 11.4) for the specialist studies ToR and specialist input required. Additional technical input also informs the EIA process (refer section 11.5 in Scoping report). Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 5.1. The comment is noted. The specialist studies for the proposed project includes a Transport Impact Assessment and a Socio-economic Impact Assessment. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 5.2. The comment is noted. The specialist studies for the proposed project includes a Faunal and Avifaunal Impact Assessment. Potential impacts for the proposed project will be assessed in the

		Airport construction, with its attendant noise, increased human activity, and altered land use, directly threatens wildlife habitats. This is further explored below. 5.2.1 Avian and Amphibian Concerns While the reports touch upon the broader impact on wildlife, a more detailed examination of avian and amphibian ecosystems is notable. Avian life, including various bird species, could face disturbances due to increased air traffic and noise pollution. Additionally, alterations in the landscape may disrupt nesting and foraging patterns, leading to potential population declines. Amphibians, particularly sensitive to environmental changes, may experience habitat loss and water contamination. The potential use of water bodies for airport-related activities could introduce pollutants, endangering the delicate balance of these ecosystems. Given the ecological significance of avian and amphibian life, a comprehensive environmental impact assessment must delve deeper into the specific challenges these species might encounter. The absence of such detailed insights in the broader area calls into question the reports' ability to provide a holistic understanding of the environmental consequences of the proposed airport construction. 5.3 Environmental Oversight, Conservation Gaps, and Neglected Surrounding Areas The documentation regarding the Cape Winelands Airport (CWA) development acknowledges the necessity of considering environmental factors but falls short in assuring the adequacy of proposed mitigation measures. This section critically scrutinizes potential environmental impacts and highlights perceived deficiencies in strategies meant to address these concerns.	Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 5.2.1. The comment is noted. The specialist studies for the proposed project includes a Faunal and Avifaunal Impact Assessment. Freshwater Ecological impacts will also be included for assessment in the Impact Assessment Phase of the proposed project. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 5.3. The comment is noted. The Pre-application Scoping Phase does not assess impacts, and this information will only become available when the relevant Impact Assessment studies are completed in the Impact Assessment Phase of the EIA process. All registered IAPs will be given the opportunity to consider and comment on the specialist studies.

		5.4 Incomplete Air Quality Assessment While the reports underscore the significance of maintaining air quality standards, they lack a thorough examination of expected emissions from airport activities. The absence of a comprehensive analysis raises doubts about the efficacy of proposed measures to mitigate air pollution. Without a detailed understanding of potential pollutants and their sources, assurances regarding air quality preservation in the reports lack substance. 5.5 Insufficient Noise Mitigation for Wildlife Although noise considerations are briefly acknowledged, the reports do not adequately address potential adverse effects on wildlife, especially avian and amphibian species. The constant noise generated by airport operations can disrupt ecosystems, impacting breeding and survival. The absence of concrete strategies to minimize these disruptions implies a lack of commitment to preserving local biodiversity. 5.6 Unclear Water Management Plans The reports vaguely mention potential impacts on local water systems but lack a detailed examination of water management plans. Without a clear outline of measures to prevent contamination and manage increased runoff, there is uncertainty about the effectiveness of proposed strategies. This raises concerns about potential degradation of local water bodies and ecosystems due to inadequate planning and mitigation. 5.7 Limited Exploration of Renewable Energy While the reports acknowledge the importance of sustainability, there is a notable absence of detailed exploration of renewable energy alternatives. The commitment to minimizing the carbon footprint remains unclear, as the reports do not provide concrete steps toward incorporating renewable energy sources. This lack of emphasis on sustainable energy practices raises questions about the airport's commitment to environmentally friendly development.	5.4. The comment is noted. Impact Assessment studies are completed in the Impact Assessment Phase of the EIA process. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 5.5. The comment is noted. Impact Assessment studies are completed in the Impact Assessment Phase of the EIA process. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 5.6. The comment is noted. The stormwater management strategy is outlined in the Bulk Engineering Report (Appendix 21 to the Pre-application Scoping report). The stormwater management plan and stormwater master plan will be developed as input into the Impact Assessment Phase of the proposed project. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. The Freshwater Ecological Impact report will also consider the impact on wetlands and propose mitigation. 5.7. The comment is noted. The renewable energy strategy is outlined in the Electrical Supply report (Appendix 22 to the Pre-application Scoping report). It includes detail on the proposed solar PV, Biodigester, Backup generator, BESS, Eskom supply, wind energy.

		5.8 Ambiguous Waste Management Strategies The reports briefly touch on waste management but lack specificity in outlining strategies for minimizing waste generation and proper disposal. Without a clear plan for recycling materials and managing hazardous waste, there is uncertainty about the airport's adherence to waste management regulations. The ambiguity surrounding waste management practices raises concerns about potential environmental impacts and the airport's commitment to responsible waste disposal.	5.8. The comment is noted. The solid waste management strategy was included in the Pre-application Scoping Report (section 6.10) and the in-process Scoping report. Further detail will be developed in the EMPr during the Impact Assessment Phase of the EIA in the form of a Waste Management Plan. All registered IAPs will be given the opportunity to consider and comment on the specialist studies and EMPr.
		5.9 Neglected Surrounding Areas and Endangered Species Despite studies conducted on the specific area earmarked for the Cape Winelands Airport (CWA), a glaring omission is the lack of consideration for the surrounding regions, where endangered species have established habitats, notably the blue heron. This oversight raises critical concerns about the potential impact on fragile ecosystems and protected fauna.	5.9. The comment is noted. The specialist studies for the proposed project includes a Faunal and Avifaunal Impact Assessment. Freshwater Ecological impacts will also be included for assessment in the Impact Assessment Phase of the proposed project. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies.
		5.10 Limited Scope of Impact Studies While the existing reports detail the consequences within the direct vicinity of the proposed airport, the surrounding areas, crucial for the survival of endangered species, have been inadequately addressed. The absence of comprehensive studies in these regions disregards the potential displacement and disturbance of vital species, such as the blue heron, known to inhabit these ecosystems. Quote from APP-10: The acknowledgment from APP-10, stating, "The proposed activities will lead to a reduction in habitat which may increase resource competition in adjacent habitats. Moreover, the proposed airport will cover a large extent within the study area, increasing the scale of edge effects that will be experienced, causing further degradation to the surrounding habitat. The increase in both air and road traffic will increase the likelihood of	5.10. The comment is noted. The specialist studies for the proposed project includes a Faunal and Avifaunal Impact Assessment. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies.

		collisions with fauna," underscores the inadequacy of the current assessments in encompassing the broader ecological impact. 5.11 Endangered Species Habitat Reduction The proposed airport activities are predicted to result in a reduction of habitat, directly impacting endangered species like the blue heron. The lack of consideration for these adjacent habitats raises alarm about the potential escalation of resource competition and habitat degradation, as highlighted by APP-10. 5.12 Scale of Edge Effects The reports acknowledge the scale of edge effects but fail to delve into the magnitude of this impact on surrounding habitats. The proposed airport's extensive coverage amplifies the potential edge effects, contributing to the degradation of ecosystems beyond the immediate construction site. 5.13 Traffic-Related Fauna Collisions The increase in both air and road traffic, as highlighted by APP-10, raises concerns about elevated risks of collisions with fauna. The potential threats to species like the blue heron due to heightened traffic, inadequately addressed in the reports, signify a significant gap in the assessment of environmental impact.	5.11. This comment is a repeat of a previous comment but is noted. The specialist studies for the proposed project includes a Faunal and Avifaunal Impact Assessment. Potential impacts (including those on the habitat of bird species such as the blue heron) for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 5.12. Edge effects from part of all the specialists cumulative impact analysis. The comment is noted as a repeat of a previous comment. The specialist studies for the proposed project includes a Faunal and Avifaunal Impact Assessment, which includes habitat considerations. Potential impacts (including those on the habitat of bird species such as the blue heron) for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 5.13. The comment is noted as a repeat of a previous comment. The specialist studies for the proposed project includes a Faunal and Avifaunal Impact Assessment, which includes habitat considerations. Potential impacts (including those on the habitat of bird species such as the blue heron) for the proposed project will be assessed in the Impact Assessment Phase of the EIA.A bird strike specialist will also inform the EIA process. All registered IAPs will be given the opportunity to consider and comment on the specialist studies.

		5.14 Socioeconomic Impact on Mikpunt and Klipheuwel with Traffic and Infrastructure Considerations The proposed airport's socioeconomic impact, as highlighted in the reports, predominantly centers on new infrastructure, yet it seemingly neglects the potential repercussions for existing communities like Mikpunt and Klipheuwel, located approximately 6.8 km from the proposed airport site. 5.15 New Infrastructure vs. Existing Communities While the reports touch upon the creation of new infrastructure, such as the airport itself, there's a discernible tendency to downplay or overlook the potential socioeconomic effects on nearby established communities. Mikpunt and Klipheuwel, situated in close proximity to the proposed airport, are likely to witness substantial changes in their social and economic dynamics. 5.16 Existing Infrastructure Strain The reports should delve deeper into the impact on existing infrastructure in these communities. The anticipated surge in traffic and demand for services has the potential to strain local resources, significantly affecting the daily lives of residents. Schools, healthcare facilities, and other amenities may experience increased pressure, necessitating a comprehensive evaluation with proposed solutions to mitigate any adverse effects. 5.17 Traffic Impact and Road Infrastructure The reports should provide a thorough assessment of the expected traffic impact on the road infrastructure connecting Mikpunt, Klipheuwel, and the proposed airport. Increased vehicular movement may lead to road degradation, congestion, and safety concerns. The strain on rural roads and inadequate infrastructure to handle heightened traffic needs explicit attention. 5.18 Economic Impact on Residents	5.14. The comment is noted. The Socio-economic Impact Assessment will consider impacts related to the existing surrounding communities. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 5.15. The comment is noted as a repeat of the comment in 5.14. 5.16. The comment is noted. The Socio-economic Impact Assessment will consider impacts related to the existing surrounding communities and existing amenities. The Transport Impact Assessment will consider impacts related to the planned and existing road infrastructure. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 5.17. The comment is noted. The Transport Impact Assessment will consider impacts related to the planned and existing road infrastructure. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 5.18. The comment is noted. The Socio-economic Impact Assessment will consider impacts related to the existing surrounding communities including existing farms, businesses. Potential impacts for the

		An inclusive socioeconomic report should offer a comprehensive analysis of the existing economic activities in Mikpunt and Klipheuwel. It should scrutinize potential disruptions to local businesses, farms, and overall livelihoods. Moreover, the report should address the economic burden on residents, including potential increases in living costs, taxes, and other financial obligations resulting from the proposed airport.	proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies.
		5.19 Community Engagement and Consultation Community engagement and consultation processes are pivotal, demanding transparency and inclusivity. The reports should outline robust measures taken to involve residents of Mikpunt and Klipheuwel in the decision-making process. Ensuring that their concerns, needs, and perspectives are not only heard but also integrated into the decision-making process is essential. The current oversight in addressing the specific impact on Mikpunt and Klipheuwel, particularly concerning traffic, road infrastructure, and economic considerations, raises questions about the comprehensiveness of the socioeconomic report. A more inclusive analysis is imperative for a holistic understanding of the proposed airport's socioeconomic impact on existing communities and their associated infrastructures.	5.19. The comment is noted. The planned PPP for the Scoping and IA phases of the EIA are inclusive of interaction with local communities.
		6 Potential Rise in Crime and Impact on Security The reports on the proposed airport development seem to lack a comprehensive evaluation of the potential rise in crime and its consequent impact on security, particularly in the surrounding rural areas. This oversight is critical, given the current low crime rates in these regions. 6.1 Current Security Landscape The rural areas under consideration presently enjoy relatively low crime rates. The introduction of an airport and the associated influx of people, vehicles, and activities can disrupt this delicate equilibrium. The reports	6. **Potential Rise in Crime and Impact on Security** The comment is noted. The Socio-economic Impact Assessment will consider impacts related to the existing surrounding communities including crime. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 6.1. The comment is noted and will be considered by the CWA team for integration into their security strategy in future.

		should thoroughly analyze the existing security landscape, highlighting the strengths and vulnerabilities of the current setup. 6.2 Potential for Crime Uptick Increased population density and economic activities linked to the airport can attract criminal elements seeking to exploit the new opportunities. The reports should delve into the potential for a rise in various types of crimes, including theft, vandalism, and other offenses, and propose strategies to counteract these threats effectively. 6.3 Police Presence and Response The capacity of the local South African Police Service (SAPS) to handle the potential surge in crime needs detailed consideration. The reports should address whether the current SAPS resources are adequate for the increased demands, both in terms of personnel and infrastructure. Additionally, the potential response time to incidents in the rural areas affected by the airport development should be thoroughly evaluated. 6.4 Mitigation Strategies A robust plan for crime prevention and security enhancement should be an integral part of the airport development. This includes not only measures to prevent criminal activities within the airport premises but also strategies to secure the surrounding rural areas effectively. Adequate lighting, surveillance systems, and community involvement are aspects that need explicit attention. 6.5 Community Safety Concerns Residents in rural areas often choose these locations for their safety and peaceful living. The reports should acknowledge and address the legitimate concerns of the community regarding their safety and security. **7. Social and Economic considerations** The proposed construction of the Cape Winelands Airport (CWA) introduces significant social and economic concerns that warrant careful consideration.	6.2. The comment is noted. The Socio-economic Impact Assessment will consider impacts related to the existing surrounding communities including crime. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 6.3. The comment is noted. The Socio-economic Impact Assessment will consider impacts related to the existing surrounding communities including crime. The evaluation of SAPS resources will be addressed through the local security structures before onset of any construction activities on site. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 6.4. The comment is noted. The recommendation will be considered in the EMPr for the proposed project. 6.5. The comment is noted. The Socio-economic Impact Assessment will consider impacts related to the existing surrounding communities including crime. The planned PPP during the Scoping and EIA phases of the proposed project may also create the opportunity for the local communities to raise concerns re safety and security. 7. **Social and Economic considerations**

		This section critically examines potential disruptions to communities, the impact on rural living, and the broader economic landscape. 7.1 Disruption to Rural Living The serene charm of rural living faces a substantial threat with the advent of the airport. The anticipated surge in traffic, accompanied by noise and pollution, poses a direct challenge to the peaceful coexistence of rural communities. While the reports acknowledge these potential disruptions, they fall short in providing a thorough exploration of the extent of the impact on residents' daily lives. The surge in traffic can lead to congestion on rural roads, longer commute times, and heightened risks, highlighting potential inadequacies in existing road networks. The reports need to offer more in-depth insights into the social and economic consequences of these disruptions, addressing concerns about road infrastructure and accessibility for rural communities. 7.2 Crime Uptick and Security Challenges As mentioned earlier, current low crime rates in rural areas may face an escalation with the establishment of the airport. The reports lack a comprehensive discussion of potential strain on law enforcement resources and fail to outline robust plans for mitigating the increased risk of criminal activities. The anticipated rise in population density and traffic may attract criminal elements, necessitating a more detailed examination of potential security challenges. The reports should provide concrete strategies to safeguard the safety and security of rural communities in the face of potential crime upticks. 7.3 Economic Impact on Existing Businesses While the reports mention new infrastructure, they overlook the potential economic ramifications for existing businesses, especially in areas like Mikpunt and Klipheuwel. Local resources, including schools and healthcare facilities, may experience strain, impacting the operations of	7.1. The comment is noted as a repeat of a previous comment 5.17. The Transport Impact Assessment will consider impacts related to the planned and existing road infrastructure. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 7.2. The comment is noted as a repeat of a previous comment 6.2. The Socio-economic Impact Assessment will consider impacts related to the existing surrounding communities including crime. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 7.3. The comment is noted as a repeat of previous comments 5.16 and 5.18. The Socio-economic Impact Assessment will consider impacts related to the existing surrounding communities, businesses, farms, and existing amenities. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All

		established businesses. A thorough socioeconomic analysis should delve into the existing economic activities, assessing potential disruptions to local businesses and farms. Transparent community engagement processes must be outlined, ensuring the concerns of these existing businesses are integral to the decision-making process. 7.4 Traffic Impact and Road Infrastructure The projected surge in traffic demands a meticulous examination of its impact on rural road infrastructure. The reports should offer detailed plans for upgrading or expanding infrastructure to accommodate increased traffic flow, yet such insights are lacking. The absence of clear proposals for road infrastructure upgrades raises doubts about the feasibility of handling the expected rise in vehicle movements. A comprehensive examination of potential traffic impacts and detailed plans for road infrastructure upgrades is imperative for a robust evaluation of the proposed airport. 7.5 Rise in Cost of Living The rise in population density coupled with potential increases in living costs necessitates a closer examination. The reports should delve into the potential impacts on housing affordability, property taxes, and overall living expenses for rural families. An economic analysis should transparently communicate how the proposed airport might contribute to changes in the cost of living for residents. This information is vital for residents to make informed decisions about their future in these rural communities **8. Public participation and transparency** The cornerstone of responsible and democratic decision-making lies in robust public participation processes and transparency. This section critically assesses the adequacy of public engagement in the planning and decision-making stages of the Cape Winelands Airport (CWA) development, emphasizing the need for transparency.	registered IAPs will be given the opportunity to consider and comment on the specialist studies. 7.4. The comment is noted. The Transport Impact Assessment will consider impacts related to the planned and existing road infrastructure. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 7.5. The comment is noted. The Socio-economic Impact Assessment will consider impacts related to the existing surrounding communities, businesses, farms, and existing amenities. Potential impacts for the proposed project will be assessed in the Impact Assessment Phase of the EIA. All registered IAPs will be given the opportunity to consider and comment on the specialist studies. 8. **Public participation and transparency**

		8.1 Accessibility of Information Transparency hinges on the accessibility of information to the public. The reports acknowledge the complexity of the documentation and the technical nature of the content, raising concerns about the public's ability to comprehend the details effectively. A comprehensive strategy for making information more accessible, perhaps through simplified summaries is crucial for meaningful public participation. While the reports may fulfill technical requirements, they fall short in ensuring that the general public, who may be directly impacted, can readily engage with and comprehend the implications of the proposed airport construction. A commitment to providing easily digestible information is paramount for fostering inclusive participation.	8.1. The comment is noted. The planned PPP during the Scoping and IA Phases of the EIA are inclusive of public engagements where IAPs can interact with the CWA team, the EAP and the specialists. Technical queries can also be raised directly with the EAP, who will then endeavour to provide feedback from the specialist if required.
		8.2 Inclusivity in Decision-Making The reports should elaborate on the extent to which diverse stakeholders, especially local communities and environmental groups, have been involved in the decision-making process. A lack of inclusivity raises questions about the legitimacy of the decisions made and the consideration given to the perspectives of those directly affected. Transparent communication regarding stakeholder engagement, the incorporation of community feedback, and the adjustment of plans in response to concerns are essential elements in ensuring a fair and inclusive decision-making process. The reports must provide a comprehensive account of the steps taken to include diverse voices.	8.2. The comment is noted. Three periods of 30-day public participation are afforded during the EIA process (pre-application scoping, statutory scoping and impact assessment phases). IAPs are invited through direct communication (emails), notice boards, adverts in local newspapers, hard copy in Fisantekraal library, to register and provide comment. The planned PPP during the Scoping and IA Phases of the EIA are inclusive of public engagement where IAPs can interact with the CWA team, the EAP and the specialists. All comments received are recorded and responded to in a Comments and Responses report, which together with the IAP register, is provided to DEA&DP as part of their decision-making process. Where comments or concerns were included in specialist reports or in the Scoping/ Impact Assessment/ EMPr reports it is indicated.
		8.3 Community Concerns Addressed Public participation is not merely a procedural requirement but a platform for addressing and incorporating community concerns. The reports should explicitly outline how identified concerns raised by the public have been addressed and integrated into the planning process.	8.3. The comment is noted. All comments received are recorded and responded to in a Comments and Responses report, which together with the IAP register, is provided to DEA&DP as part of their decision-making process. Where comments or concerns were

		In cases where community concerns have not been adequately addressed, a transparent account of the reasons for such decisions should be provided. Clarity on the resolution of community concerns is vital for maintaining trust in the decision-making process. 8.4 Independent Review and Validation Transparency is further bolstered through independent review and validation of the reports. The absence of clear indications of external expert evaluations in the documentation raises questions about the independence and objectivity of the findings. To enhance transparency, the reports should provide details on any external reviews conducted, ensuring that a diverse set of experts has scrutinized the methodologies, findings, and proposed mitigation measures. Independent validation is a cornerstone in affirming the credibility of the reports. 8.5 Timely and Responsive Communication: Transparency is not a static state but a dynamic process that necessitates timely and responsive communication. The reports should detail the mechanisms in place for ongoing communication with the public, especially in addressing emerging concerns or providing updates on the project's status. A commitment to regular and responsive communication, perhaps through public forums or online platforms, reinforces transparency and demonstrates a willingness to engage with the public throughout the various stages of the airport development. **9. Conclusion** In the meticulous scrutiny of the proposed Cape Winelands Airport (CWA) development, this comprehensive assessment underscores critical	included in specialist reports or in the Scoping/ Impact Assessment/ EMPr reports it is indicated. 8.4. The comment is noted. Specialists are required to be independent and include a declaration of this in each of their reports. External review will be introduced once it is identified by the EAP or DEA&DP as a requirement. 8.5. The comment is noted. Three periods of 30-day public participation are afforded during the EIA process (pre-application scoping, statutory scoping and impact assessment phases). IAPs are invited through direct communication (emails), notice boards, adverts in local newspapers, hard copy in Fisantekraal library, to register and provide comment. The planned PPP during the Scoping and IA Phases of the EIA are inclusive of public engagement where IAPs can interact with the CWA team, the EAP and the specialists. All comments received are recorded and responded to in a Comments and Responses report, which together with the IAP register, is provided to DEA&DP as part of their decision-making process. Where comments or concerns were included in specialist reports or in the Scoping / Impact Assessment / EMPr reports it is indicated. 9. **Conclusion**

		considerations that warrant profound reflection and, more importantly, public input. The multifaceted dimensions of environmental impact, socioeconomic implications, security concerns, and transparency in decision-making collectively paint a complex canvas that demands meticulous attention. The reports, though commendable in their scope, reveal noteworthy gaps and oversights that could significantly impact the well-being of both the environment and the communities affected. From the ambiguity surrounding consultant expertise to the inadequacies in addressing the potential rise in crime and the nuanced socioeconomic impact on existing communities, these observations illuminate areas where further scrutiny and refinement are imperative. Particularly, the potential environmental repercussions, from incomplete air quality assessments to the neglect of surrounding areas and endangered species, necessitate a recalibration of strategies to ensure a harmonious coexistence between progress and conservation. The proposed airport's impact on rural living and existing infrastructure, coupled with the potential risks to community safety, further accentuate the need for a meticulous and transparent evaluation. As we navigate the intricacies of this proposed development, it is incumbent upon all stakeholders, regulatory bodies, and the public to engage collaboratively. The essence of democratic decision-making lies in the inclusivity of diverse perspectives, and this document stands as a voice of the public. In accordance with the principles of transparent governance and responsible development, the regulatory framework governing public comments becomes a cornerstone. 10. My comment as whole, based on the various reports and as a resident of the Mikpunt community, am against the construction of a second airport barely 30 minutes from another airport.	The comment is noted, and the input acknowledged. The concerns listed again have been addressed in responses above. The opposition against the construction of the proposed CWA is noted. The EIA process has various stages, and the extent of the comments are all covered under a specialist discipline scope that will present and assess the expected impacts. 10. The comment is noted.

227	Stephen Levetan - **County Fair**	*Email dated 23 August 2024:* 1. Please find attached my even-dated letter setting out my client's objections and comments on the In-Process DSR and WULA Technical Report, which processes are being run by PHS Consulting as part of the One Environmental system. Kindly confirm receipt. *Letter reived via email dated 23 August 2024:* 2. We act, as you are aware, for the County Fair Division of Astral Operations Limited which entity is registered as an Interested and Affected Party, having participated through ourselves in the Pre-Application Draft Scoping Report process in December last year. We have been mandated, once again, to submit comments on the In-Process DSR on County Fair's behalf, which we do hereunder. **3. Preliminary Point** Having regard to the Comments and Responses Report on the p-a DSR (Appendix 30) and in particular to the responses to our client's comments, we are surprised that most of the specialist studies submitted in support of the In-Process DSR have remained unchanged other than having their dates changed. What then was the purpose of conducting a Pre-Application DSR phase if comments by I&APs which you yourself state in your responses would be addressed, have not found their way to the specialists and have accordingly not been dealt with as part of their specialist study scoping reports? Accordingly, and where these reports have remained the same, we do not propose commenting thereon again and our comments thereon as set out in our letter to you of 7 December 2023, must be read as if specifically incorporated herein. **4. Comments on the In-Process DSR** We propose commencing with aspects of the Comments and Responses Report (Appendix 30) and will thereafter comment on some the updates contained in	*Email response provided 23 August 2024:* 1. Thank you for the email and the attached letter. I confirm receipt of your communication Response to comments: 2. The comment is noted. 3. The comment is noted. Where amendments were required to reports they were underlined and dates of documents amended to reflect updates. The pre-application draft Scoping report was circulated for comment from 8 November 2023 up to and inclusive of 8 December 2023. Where comments from I&APs could not be addressed in the Scoping Phase of the proposed project, it was highlighted that these would be addressed within the Impact Assessment Phase. The purpose of the pre-app Scoping is to ensure most issues are captured and then to ensure all the required studies is recognised and commissioned. The in-process Scoping is then conducted to ensure no issues are missed and that the POS for EIA is bolstered to accommodate all matters of concern. The impacts are then only assessed during the EIA Phase. It is unclear to the EAP which comments have not been addressed or remain valid making a response difficult. 4. The comment is noted.

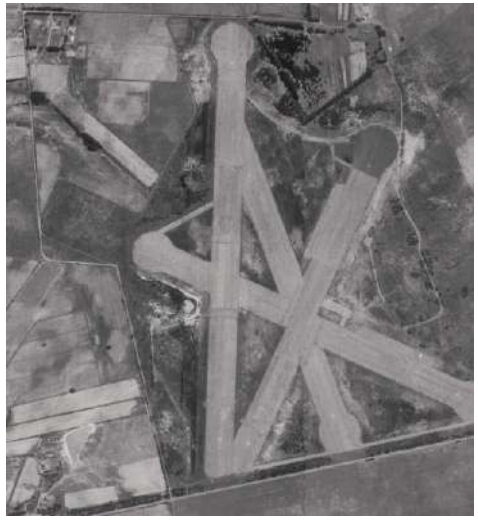
		the In-Process DSR and will canvass certain of the specialist studies that we believe are important in order to place our client's concerns properly before yourselves, DEA&DP and DWS. We will thereafter comment on the Water Use Licence Technical Report which was not part of the documents available in the Pre-Application phase. **5. Comments and Responses Report relating to our client and our letter of 7 December 2023:** 5.1. In paragraph 2 on page 177, the following response is set out : "CWA confirm that they are keen on establishing an open and constructive dialogue with County Fair (CF). To this end, CWA propose setting up a joint monitoring committee at the appropriate time that includes representatives from both organizations. This committee should meet regularly to review environmental data and address any concerns proactively. CWA have engaged a specialist poultry specialist to assist in addressing the concerns raised." 5.1.1. We record that up to now our client has not had an approach from CWA to establish such a joint monitoring committee and we would have thought that such a committee ought to have been set up at an early stage so as to enable our client to raise its concerns directly with CWA which, in turn, could then address these concerns in both the In-Process DSR and the subsequent EIA phases.	5. 5.1. 5.1.1. CWA response CWA is committed to fostering an open and constructive dialogue with County Fair (CF) through the establishment of a Joint Monitoring Committee, where both organizations are represented. This committee is intended to meet regularly to review environmental data and proactively address any concerns. While the Joint Monitoring Committee has not been formalised yet, in-person meetings were held on the 26th of August 2022, the 15th of February 2023, the 18th of May 2023, the 27th of June 2023, the 4th of August 2023, and the 22nd of August 2024, with relevant CF officials. These meetings, all initiated by CWA, included high-level representatives such as the Group Chief Operating Officer, the Chief Operating Officer of the Western Cape, and the Agricultural Manager, among others. Each meeting was followed up with minutes prepared and distributed by CWA to all parties involved,

			reflecting CWA's continuous efforts to reach a mutual agreement with CF. Securing meetings with CF has not always been easy, with CWA having to make multiple requests before meetings are secured. During the most recent meeting, CF representatives apologized for the lack of communication, citing significant challenges such as Bird Flu and extensive load shedding over the past year as reasons for their distraction. CWA understands that these challenges were not within CF's control and will continue to make every possible effort to continue engaging and collaborating with CF.
		5.1.2. In regard to the poultry specialist, we refer to the email exchanges between the writer and your Ms Amanda Fritz-Whyte. She has informed us that the assessment by CWA's poultry specialist will only be made available in the EIA phase and our client will, per force, have to deal therewith at that stage. With respect, if the poultry specialist's assessment was to be made available to our client at an earlier stage and, if CWA is serious about "establishing an open and constructive dialogue" with our client, it would make such assessment available to our client well before the EIA public participation period. We say so for the reason that we have made it abundantly clear in our letter of 7 December 2023 that for a host of reasons it is totally incompatible for the expanded airport project to co-exist immediately adjacent to our client's sensitive laying farm.	5.1.2. The comment is noted. The Poultry Assessment forms part of the Impact Assessment Phase and is based on other specialist reports and input before being available for distribution. Therefor it will become available to all registered I&APs during the Impact Assessment Phase for comment.
		5.2. In paragraph 3 on page 178, you respond, inter alia, in the context of the suggestion that our client should acknowledge the changing landscape and you make the statement that "… a proactive approach will be crucial to safeguard their production chain in this changing setting including potentially moving the operations elsewhere." In regard to this statement and the suggestion that our client, due to the changing landscape, should consider moving its operations elsewhere, we place on record that it is most unreasonable for CWA to foist this on our client. Our client's laying	5.2. CWA response The farm very may well have been in existence for 57 years, which we don't have evidence to refute. Farm 724, portion number 9, and Farm 175, portion 2 was bought by Astral Operations Limited on the 1st of October 2004 and only registered in the deeds office on the 28th of July 2005 and hence has been owned by the company for 19 years.

			farm immediately adjacent to the proposed airport expansion project has been in existence for 57 years and, as stated in our letter of 7 December 2023, is responsible for some 38% of our client's total laying stock in the Western Cape.	

OWNER INFORMATION (1)			
ASTRAL OPERATIONS LTD			
Person Type	COMPANY	Title Deed	T59539/2005
Name	ASTRAL OPERATIONS LTD	Purchase Date	2004/10/01
Registration Number	194702745306	Purchase Price (R)	186 833
Share (%)	-	Registration Date	2005/07/28

The Operations of the chicken farm were not there before the Airport.



A 1980 image shows the farm may have existed in 1980, but the farm was substantially different to what it is now.

		5.3. You also make the point on the same page in paragraph 3(a) that the Cape Winelands Airport was established in 1943 and predates our client's laying farm. To call the Fisantekraal airfield an airport is a complete misnomer. The activities at the airfield have not impacted on our client's operations and furthermore, the human activities and facilities are situated a fair distance from our client's chicken houses whereas, if regard is had to the proposal and the site development plans, the landside activities at the proposed airport will be immediately adjacent and very close to our client's nearest chicken houses. 5.4. In your response in paragraph 3(c) on page 179, you make reference to the fact that in the areas like Fisantekraal "comprehensive planning is crucial to ensure coexistence and minimize mutual negative impacts". The writer advises that he was fully involved in both the EIA and the land use planning applications in respect of the Greenville Garden Cities	 5.3. CWA response The term "airport" broadly encompasses facilities that serve aircraft, and Fisantekraal has served as such since its establishment in 1943. The terminology used reflects its function over the decades, accommodating various aviation-related activities, which is consistent with the usage of the term "airport" globally. Historical activities at Fisantekraal Airfield may not have directly impacted your client's operations, the development plans for Cape Winelands Airport are designed with significant consideration for the surrounding environment, including the proximity to agricultural operations. The site's historical use as an aviation facility demonstrates that aviation activities can coexist with agricultural operations when managed correctly. 5.4. CWA response

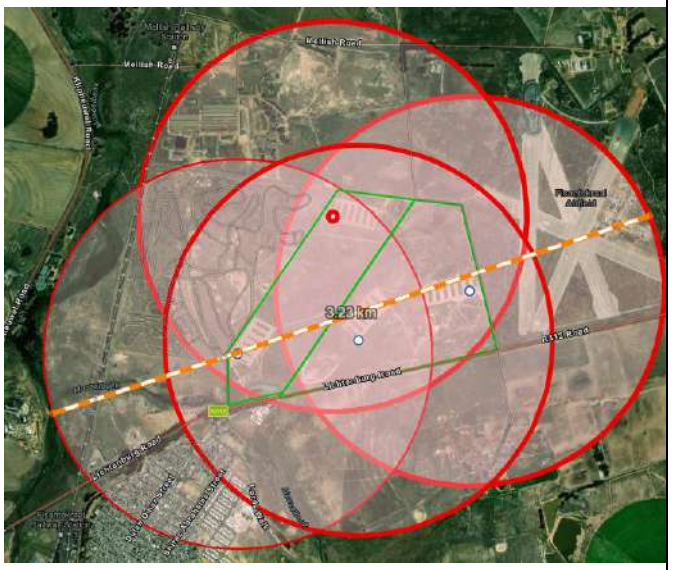
		Development as well as the nearby proposed Bella Riva Development (in respect of which please see our comments in paragraph 13 below). Our client's concerns and opposition to the Greenville Garden Cities Development culminated in a comprehensive agreement being reached catering for buffer zones and development nodes with sufficient distance to protect the biosecurity of our client's operations in the area and in particular, our client's laying farm adjacent to the proposed airport expansion project. Furthermore an Environmental Advisory Committee was established and the writer represents our client's interests on that committee which has now met more than 50 times. While the object of that committee is to ensure compliance with the conditions of Greenville Garden City EA, the committee also considers broader environmental concerns including those of Fisantekraal. We mention this so as to provide an example of an active committee which CWA suggests it is committed to.	Noted. As mentioned above, CWA has had extensive consultations with CF and will continue to do so. The environmental impacts will be made available during the environmental impact phase of the EIA. According to record CF objected to developments around CWA including the Greenville and Bella Riva developments in Fisantekraal and the Distel development in Klapmuts. In the agreement with Bella Riva dated the 14th of January 2014, CF agreed to withdraw its objection to the development if a restrictive Memorandum of Agreement was signed. In this agreement CF agreed to move if Bella Riva provided suitable alternative land meeting strict criteria (e.g., groundwater supply, power access, biosecurity). This is again echoed in the comment where CF are willing "to find a solution that will allow the project to proceed and for our client's operations on the adjacent farm to be relocated at no cost to our client" as contained in point 44 of their letter. The executive summary of the Poultry Report conducted for the Distell Development mentioned above said "the proposed Distell development is not expected to increase biosecurity risks for nearby poultry farms, provided that certain precautions are maintained. Specifically, risks may arise if the development includes features that attract wild birds, such as the construction of dams, the creation of water bodies due to inadequate drainage, or the presence of food waste. However, none of these factors are present in the current Environmental Impact Assessment Proposal. Poultry health can potentially be impacted by noise, air pollution, dust, water pollution, and water scarcity. These concerns can be effectively managed and mitigated, as outlined in the report, ensuring that any impact on poultry in the surrounding area remains minimal."
		5.5. In paragraph 4 on page 180, you make the statement that "(i)t is crucial to recognise that the facility's vulnerability to disease is not solely contingent on the airport's development but is instead threatened by a confluence of multiple developments in the area. … Each of these elements, individually and collectively, can significantly influence the risk of disease, making it imperative to adopt a wholistic view of the regions	5.5. The comment is noted.

		development and its impact on health and safety measures at the facility." In regard to this statement, we make the following comments : 5.5.1. The proposed industrial development on Portion 1 of the farm Lichtenberg 175/1, Fisantekraal, which underwent an EIA in and during 2008 and which obtained an EA either later that year or in 2009, has never been developed.	5.5.1. CWA comment Please note in the agreement with Bella Riva dated the 14th of January 2014, CF agreed to withdraw its objection to the development if a restrictive Memorandum of Agreement was signed. In this agreement CF agreed to move if Bella Riva provided suitable alternative land meeting strict criteria (e.g., groundwater supply, power access, biosecurity). This is again echoed in the comment where CF are willing "to find a solution that will allow the project to proceed and for our client's operations on the adjacent farm to be relocated at no cost to our client" as contained in point 44 of their letter. On the 17th of June 2008, CF objected, in respect of Portion 1 of the Farm Lichtenberg 175/1. An agreement was reached between Glenfairprop (Pty) Limited and CF regarding the proposed industrial development on Portion 1 of Lichtenberg Farm 175/1. The key resolutions included the establishment of a 300-meter buffer zone, an access road to address biosecurity concerns, confirmation from the City of Cape Town on adequate water supply and foul sewer capacity and the inclusion of a standby generator to mitigate potential sewage pump failures. Additionally, a monitoring committee was to be created to address ongoing environmental concerns, particularly air quality, within the Fisantekraal Industrial Park Property Owners Association. After discussions with the owner of the affected property, there has not been any monitoring committee meetings since the objection.

			With these agreements in place, the CF agreed to withdraw its objection, contingent upon these conditions being incorporated into the final Basic Assessment Report and enforced as conditions of development authorization. CWA believes that the restrictive conditions that CF have done on all neighbours surrounding them have hampered and restricted development in the area. The inclusion of a Poultry assessment in the EIA phase of the application will shed light on the portial impacts of the CWA on CF
		5.5.2. The Bella Riva Development of which mention is made in your comments, and which we refer to in paragraph 13 below, obtained its initial EA on 29 January 2014 and while there have been a number of amendments thereto subsequently, no development as such has occurred. In regard to Bella Riva, a comprehensive agreement was entered into between the developer and our client with measures to protect our client's biosecurity on its laying farm included therein. We refer in more detail to this in paragraph 13 below.	5.5.2. CWA response Refer points 5.4 and 5.5.1 responses
		5.6. On page 181, in paragraph 4.1.3 and its subparagraphs, you deal extensively with the issue of wild birds and the fact that the proposed airport will make common cause with our client thereon due to the potential of bird strikes during the take-off and landing of aircraft. We have taken note of the fact that a bird strike specialist has been included as a specialist study for the project but, like the poultry specialist, the report is not yet available for public comment. It seems though that between CWA and our client, appropriate steps will and should be taken to prevent wild birds being attracted to the area.	5.6. The comment is noted.
		5.7. In paragraph 5 on page 184, you state that the request for the inclusion of the County Fair boreholes in the geohydrological impact assessment will be complied with. We will deal with this in further detail when we deal with the two GEOSS geohydrological assessments that have been	5.7. The comment is noted. Noted, the full Groundwater Impact Assessment is yet to be submitted under the EIA process.

		made available, the one being Appendix 2 and the other being Appendix A to the WULA Technical Report (Appendix 31).	
		5.8. At the end of paragraph 9 on page 186, when dealing with the stormwater system and the need to avoid birdlife being attracted thereto, you state "(t)he design will be finalised and shared with registered IAPs during future public participation for comment." Due to our client's particular sensitivity in this regard, we request that CWA takes our client into its confidence by making available the stormwater system design ahead of the public participation process for the EIA phase which will once again be limited to a mere 30 days. This crucial aspect ought to be one that the proposed joint monitoring committee deal with in a transparent and collaborative manner in the interests of both CWA and our client.	5.8. The request is noted. The proposed stormwater design will be available for comment to all registered I&APs during the Impact Assessment Phase of the proposed project.
		5.9. In paragraph 13 on page 187, you respond that GEOSS will take into account the potential adverse impact which abstraction from the CWA boreholes can have on our client's boreholes during the geohydrological impact assessment. While this is noted at this juncture, we comment in more detail on this aspect when dealing with the two GEOSS reports hereunder.	5.9. Noted, the full Groundwater Impact Assessment is yet to be submitted under the EIA process.
		5.10. In paragraph 14 on the same page, you have acknowledged the need for a MHI Risk Assessment and you state that it has been included in the suite of specialist studies to be completed for the project and that once available, it will be provided to registered IAPs as part of the impact assessment phase for consideration and comment. Our client's rights to deal therewith and to consider any potential adverse impacts on our client's laying farm, are hereby expressly reserved.	5.10. The comment is noted.
		5.11. Your comments in paragraph 15 on page 188 dealing with the potential impact which the bright lighting at the airport will have at our client's adjacent laying farm are noted. In the absence of the poultry specialist's assessment, we do not know on what basis your comments in the paragraph starting with "The majority of chicken laying facilities …" are derived from. Accordingly, the last sentence of that paragraph in which you conclude that the potential disruptions caused by airport lighting can be negated by our client using blackout curtains or similar light-blocking	5.11. CWA response During the most recent in-person meeting with the Group Chief Operating Officer and the Chief Operating Officer of the Western Cape, on the 22nd of August 2024, the issue of reducing noise and light pollution for the birds was discussed. However, CF concluded that in an urban area,

		solutions to ensure that light from external sources, like an airport, does not penetrate the interior, seems to be unfounded in the absence of adequate specialist assessments in this regard. We reserve our client's rights to comment further in due course once the specialists reports are available but the suggestion that our client should use blackout curtains or similar light-blocking solutions is once again an imposition by the proposed airport expansion which our client has not had any need for up to now. 5.12. In paragraph 23 on page 191, you indicate that the Draft Scoping Report has been amended to reflect proposed water supply mix to the project. We will deal with this aspect when dealing with the amendments to the DSR hereunder. 5.13. In paragraph 25 on page 192, you state in response to our comment that our client strives to maintain a 1000 m buffer zone around its chicken houses that "(t)he buffer zones referred to here are inconsistent with the agreement with Bella Riva which relates to 300 m". You are completely mistaken in this regard. The agreement reached with regard to the Bella Riva development was premised on a SDP which showed a low intensity golf course development adjacent to our client's adjacent laying farm. It was for this reason that the standard 1000 m buffer zone was reduced but it is totally incomparable with the high intensity landside development in close proximity to our client's laying farm which is apparent from the proposed airport expansion project. There can be no doubt that the various landside activities of the proposed project will bring a far greater number of human beings on to land immediately adjacent to our client's chicken houses which is totally dissimilar to what was intended at the time the Bella Riva agreement was entered into. Accordingly, your contention that the buffer zones referred to in our comment are inconsistent with the agreement reached with Bella Riva, are rejected.	such impacts are inevitable and should be accepted by CF. In this meeting it was concluded backyard poultry was as much of a risk as wild birds and that people working on those physical farms was in fact the biggest problem. All Impact Assessment studies inclusive of mitigation measures will be made available during the environmental impact phase of the EIA. 5.12. Noted 5.13. CWA response: While CWA understands that the proposed airport expansion represents a higher intensity of development, it is crucial to recognize that modern urban planning and development techniques allow for effective mitigation strategies even within reduced buffer zones. The introduction of physical barriers, landscape buffers, and advanced odour and noise control measures are all factors that can significantly diminish any potential impacts on the laying farm. Moreover, the airport expansion project includes extensive environmental and impact assessments designed to ensure that all potential risks are adequately addressed and mitigated. The assertion that a standard 1,000m buffer zone is necessary in this case overlooks the fact that each development context is unique, and buffer zones should be tailored to the specific circumstances rather than applying a one-size-fits-all approach.

		Comments on the updates contained in the In-Process DSR 5.14. The In-Process DSR contains a far more detailed executive summary than was available in the p/a DSR. We note that in regard to the landside precinct development, the concept of food processing has been introduced. It is not clear what the food processing will comprise of. Our client's concern is that food processing involves the potential to attract flies and rodents particularly when it comes to the disposal of food waste. Inasmuch as this will be part of the proposed landside facilities which, as is apparent from the SDPs, are immediately adjacent to our client's chicken houses and are nearer than 1000 m therefrom, our client requires far more detail as to where this food processing will occur and what it will comprise of in order to understand its potential adverse impact on our client's operations.	The proposal by CF sterilises all commercial developments in 9km^2 of land within the urban edge, where the MPBL allows for this development.  5.14. CWA response: Food processing primarily involves in-flight catering, cold storage, and distribution of perishable goods, as well as packaging and quality control activities to ensure food safety and freshness. Facilities may also produce ready-to-eat foods, beverages, and specialty items for sale in terminals or on flights. Additionally, export-oriented food processing for perishable goods, contributing to the global food supply chain. These operations are designed to meet the demands of travellers, airlines, and international trade efficiently.

			Disposal of food waste will be done within accepted global norms and according to the authorised Waste Management Plan for the project.
		5.15. On page 65 of the In-Process DSR, preliminary water uses identified for the proposed project are listed. Some 7 different water uses are mentioned and we will comment on this when dealing with the technical WULA report hereunder.	5.15. The comment is noted.
		5.16. On page 76 of the In-Process DSR, reference is made to the City of Cape Town's Water By-law (2010) and the Water Amendment By-law (2018). It is noted that CWA would need to comply therewith and obtain a WUL and that in order for the project to comply, a Water Services Intermediary Agreement with the City of Cape Town in terms of the Water Services Act, will be required. It is further noted that this agreement will follow on the completion of the EIA and WULA processes. While our client notes this requirement, it remains concerned that due to the lack of Municipal supply in the short term, the initial phases of the project will require groundwater and what the impact of abstracting such groundwater will have on our client's own groundwater supply. This aspect will be dealt with in more detail when we deal with the GEOSS reports hereunder.	5.16. The water strategy for the site relies on short term groundwater supply and medium to long term municipal supply, to enable the development of municipal bulk supply to the site. Recycling of treated sewage water is also considered. The concern relating to the abstraction of groundwater on the County Fair groundwater supply is noted. GEOSS response: Noted, various other sources of water will also be made use of and not only just groundwater supply. The full Groundwater Impact Assessment is yet to be submitted under the EIA process.
		5.17. On page 164 of the In-Process DSR, the proposed biodigester is expanded upon. We note that in light of our comments in regard to the supply of chicken manure in our letter of 7 December 2023, it is now stated that an alternative feedstock for the biodigester such as grass which can be farmed outside of 1 km on the airside development area, thus decreasing the risk of attracting birdlife, is proposed. This alternative feedstock would be preferable to chicken manure sources from other chicken farms in the area because the digestate that remains after the chicken manure has been processed through the biodigester becomes a problem. The writer is aware of another application for environmental authorisation involving biodigesters utilising chicken manure and the composting of the digestate thereafter. The authorisation was refused on the basis of opposition from the City of Cape Town to the increased odour levels that would result from composting the chicken manure digestate. The applicants for the proposed airport expansion need to be aware of this	5.17. The preference of grass as an alternative feedstock to the biodigester is noted. The comment re the composting of the digestate from chicken manure is noted and will be considered.

		problem. We note from page 179 of the In-Process DSR that it is stated that the solid fraction from the digester can be used for fertiliser application to land, dependant on the development of a suitable offset market. What is not clear is where the solid fraction will be stored; hence our reference to the issue of odour nuisance.	
		5.18. Starting on page 166 of the In-Process DSR, secondary backup power supplies are dealt with. Amongst these are diesel driven generators. These generators will also produce noise and it is not clear from the SDPs in Appendix 26 precisely where these backup generators will be located. Please ensure that the noise impact assessment considers the contribution which the backup diesel generators will give to the overall noise generated by the proposed development.	5.18. The comment is noted.
		5.19. The proposed photo-voltaic systems and the consideration of vertical wind turbines suggested in the In-Process DSR are, in our client's view, more preferable to the supply of energy to the proposed project than the biodigester with its negative aspects.	5.19. The comment is noted.
		5.20. In paragraph 7.4.3 on page 237 of the In-Process DSR, you have summarised the results of the hydropedology assessment which included a desktop analysis, a field survey, sampling activities and hydrological modelling. You indicate that the purpose of that study was to investigate the recharge mechanisms of the water courses to ensure that development planning considers hydropedologically important areas. The study found that due to the nature of the underlying soils, water moves upward due to evapotranspiration, leading to a very slow recharge rate. What is not clear from your summary or, for that matter, from the GEOSS reports and the hydropedology assessment itself, is the potential for the aquifers to recharge.	5.20. The conceptual models detailing the flow paths as well as where infiltration will take place is illustrated in Figure 31 of the Hydropedological report. The summary of the modelling exercises conducted in the hydropedology study (Table 14) also indicate the modelled change in percolation into the subsurface from rainwater both pre- and post-development. It was not within GEOSS's scope of work to investigate aquifer recharge potential in the area. There are, however, conceptual models detailing the flow paths as well as where infiltration will take place in Figure 31 of the Hydropedology study. The summary of the modelling exercises conducted in the hydropedology study (Table 14) also indicate the modelled change in percolation into the subsurface from rainwater both pre- and post-development.
		5.21. In paragraph 8.1 on page 313 of the In-Process DSR, you list the factors as to why no alternative site has been considered for the proposed project. What is missing from your analysis is any consideration for alternative	5.21. EAP response:

		layouts for the proposed development. No consideration, for example, has been given to placing the landside development on the opposite side of the runways further away from our client's adjacent laying farm. One would have thought that because of our client's concerns as set out in our previous comments on the p-a DSR, that this would at least have been considered even if it ultimately proved unfeasible. The fact that alternative layouts for the landside activities have not even been considered, constitutes in our client's view, a fatal flaw and DEA&DP's attention is drawn specifically to this aspect. 5.22. In paragraph 9.1 commencing on page 348 through to page 350 of the In-Process DSR, you summarise the potential impacts on groundwater and set out proposed preliminary mitigation measures. We do not intend dealing at any length with your summary at this juncture but choose rather to do so when dealing with the GEOSS reports hereunder. We do, however, highlight the second bullet point on page 350 where it is	Landside layout was determined by the preferred runway orientation and airside positioning Once the runway orientation was determined (through rigorous analysis), the 3.5 km runway positioning on site had to be determined. The runway could not be shifted further west, due to the physical constraints on site, such as the quarry, property boundaries and topography of the site. The runway could not be shifted further east because of space and boundary constraints. The runway had to maintain an orientation of 01-19 to allow for parallel airspace operations with Cape Town International Airport. Once the runway orientation and placement were concluded as per current proposal, vacant land existed on the west and the east for landside development. The integration of the landside development into the urban area as per forward planning documents had to be evaluated and minimising the loss of productive agricultural area was also a consideration. The incremental growth and consolidated areas for the urban area also needed to be considered as per CoCT 2023 MSDF. By proposing landside development on the east of the fixed runway would have resulted on further encroachment of productive agricultural area and wetland environments and not fitting in with the MSDF . Developing on the western side of the fixed runway it would result in infill development partly inside the urban edge and aligned with the MSDF and directly adjacent to other approved and recognised urban development. Further to this the proximity to access roads and other service alternatives and the railroad favours landside development on the west. The CF farm to the west of CWA is inside the urban edge, the area is therefore earmarked for urban densification opposed to agriculture. 5.22. The comment is noted.

		proposed as one of the preliminary mitigation measures in respect of groundwater abstraction that volumes must be monitored and borehole water levels must be monitored and should not drop below the critical water level. You also state in that bullet point that a groundwater management plan needs to be designed and implemented. 5.23. In the third bullet point, you deal with an onsite waste water treatment works and as you are aware, our client prefers that a waste water treatment works is not authorised on the site but that waste water is pumped to the Fisantekraal waste water treatment works for the reasons set out in our comments on the p-a DSR. 5.24. On page 353 of the In-Process DSR in dealing with potential noise impacts, you state that the preferred alternative will have a runway orientation which will direct the noise impact zones parallel to the Bella Riva development and along the eastern side of the Greenville Garden City Development. You state that the eastern sides of these developments may experience medium to high significant impacts. Conspicuous by its absence is any reference to our client's laying farm which lies immediately adjacent to the proposed development. It is clear that the noise impacts on our client's laying farm will have a very high significance. 5.25. In the third bullet point on page 371 of the In-Process DSR, you deal with stormwater/attenuation ponds and indicate that these must be monitored and covers/screens repaired if damaged. You also state that if leaks appear or ponding at the outlets is evident, this must be rectified to avoid attracting water fowl or larger avifauna such as herons etc which pose a risk to aircraft. This mitigation measure is supported by our client for the reason that attracting such water fowl or larger avifauna compromises our client's biosecurity. Comments on the GEOSS Groundwater Impact Assessment Scoping Report dated 8 March 2024 5.26. Aside from changing the dates from 28 September 2023 (which was the date of the groundwater impact assessment scoping report submitted with the p-a DSR) to 8 March 2024, the two reports are essentially the same. We would have thought that based on our client's concerns regarding overabstraction and its need for water security as set out in our	5.23. The comment is noted 5.24. The comment is noted. The Noise impact Assessment will be available to comment on in the Impact Assessment Phase of the proposed project. 5.25. The comment is noted. 5.26. The comment is noted.

		comments on the p-a DSR, that you would have instructed GEOSS to have at least updated the hydrocensus which, as stated in paragraph 5.2 on page 19 of the 8 March 2024 version, was carried out in early 2022.	For the Geohydrological report of 8 March 2024, it was required that a desktop update be done and the second CWA borehole's details and yield results be included. The hydrocensus will be amended to reflect this new information.
		5.27. Had an updated hydrocensus been carried out and had GEOSS taken the trouble to engage with our client, they would have established the following with regard to our client's boreholes as depicted on Map 3 on page 9 of the 8 March 2024 version of their report. The following boreholes all depicted on that map belong to our client: HBH6, HBH7, HBH8, HBH13 and HBH14. An engagement with our client would have established that boreholes HBH6 and HBH8 have dried up and are no longer in production. This may well be an important consideration for the specialist to consider in the light of (a) the reported issues regarding the aquifer's recharge and (b) the close proximity of the two test boreholes on the CWA property to our client's adjacent farm begging the question as to whether the abstraction is in fact coming from the same aquifer.	5.27. Noted, comments in the report for HBH6 and HBH7 can be updated to reflect that it is owned by County Fair. The other boreholes are indicated to be on the property of County Fair in the comment section. The hydrocensus will be amended to reflect this new information.
		5.28. Furthermore, they would have been informed of a further borehole on our client's farm which is quite close to test borehole 2 on the project's property. Our client has for the sake of convenience marked this further borehole with a red dot on Map 3 and we attach a copy thereof hereto as Annexure "A".	5.28. Noted, this additional borehole can be reflected on an updated hydrocensus map.
		5.29. We note the updates to Table 10 in the 8 March 2024 version as well as the additional pollution sources listed on page 30 thereof. If the waste water is pumped to the Fisantekraal waste water treatment works a number of the potential sources listed would be avoided. Similarly, with regard to the biodigester, the non-use of chicken manure as a feedstock, would also lessen the potential for groundwater pollution.	5.29. The statement is noted.
		5.30. We note the addition on page 31 of the 8 March 2024 version regarding the potential risk of overabstraction and that this will be analysed as part of the detailed geohydrological assessment. As such, we will defer any further comment at this stage until we receive that assessment which we trust will on this occasion include a proper analysis of the proposed	5.30. Noted, the yield report for both boreholes were included in this report, these analyses indicated how much water could sustainably be withdrawn from the aquifer, also to ensure recharge takes place even in years with continuous drought so as not to have an impact on surrounding users. The full impacts

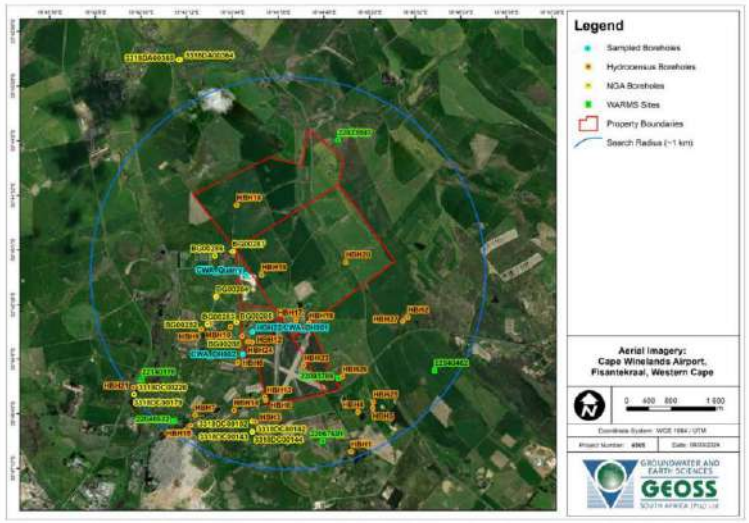
		groundwater abstraction and contamination sources which could potentially impact on our client's own groundwater resources. Comments on the GEOSS Geohydrological Assessment furnished in support of the Water Use Licence Application 5.31. We note that an entirely different report by the same specialists (although prepared by a different individual) is provided as Appendix A to the WULA Technical Report (Appendix 31 to the In-Process DSR). We also note that this GEOSS report dated 28 March 2024 is limited to that component of the WULA relating to groundwater abstraction. 5.32. In the introduction on page 1, it is stated that the WULA application is to abstract groundwater for use at the facility. In this regard, it is clear from page 9 of the WULA Technical Report that the abstraction of groundwater is but one of 8 proposed water use activities and, having regard to the proposed water uses under Section 21(f), Section 21(g) and Section 21(j), one would have expected, because of the risk of groundwater contamination, that the scope of the GEOSS study would not have been limited to groundwater abstraction only but also would have included these other water uses due to their potential to the impact on groundwater and the contamination thereof. 5.33. In paragraph 1.1. on page 2, the scope of works is set out. Conspicuous by its absence is any mention of a hydrocensus. Because of our client's concerns regarding the potential impact of groundwater abstraction for the project on its own water resources, one would have thought that the scope of works would have been expanded to include a thorough hydrocensus and inasmuch as our client's comments made on 7 December 2023 predated this report by more than 3 months, the absence of a proper and current hydrocensus in this report submitted in support of the applicant's WULA, constitutes, in our client's view, a fatal flaw. While a hydrocensus from 2022 is referred to, it does seem, in support of a WULA, to be rather outdated. 5.34. In paragraph 6.1 commencing on page 15 of this report, the specialist deals with the existing groundwater information. The specialist states	of the proposed water uses will be evaluated in the Groundwater Impact Assessment that will be submitted during the EIA process. 5.31. The comment is noted. 5.32. Noted, the risk to groundwater will be assessed in the Groundwater Impact Assessment specialist report that will be submitted as part of the EIA process. The Groundwater Management Plan, however, indicates a wide range of parameters to be tested quarterly to address issues like waste disposal or hydrocarbons at the airfield. When additional information becomes available like the biodigester, those parameters can also be included. 5.33. For the Geohydrological report of 8 March 2024, it was required that a desktop update be done and the second CWA borehole and yield results be included. The hydrocensus will be updated where information becomes available. The Geohydrological Assessment in support of the WULA (dated 28 March 2024) states under the scope of works on page 2 of the document – "*Complete an assessment of the importance of groundwater in the area by means of a hydrocensus*". A hydrocensus was completed for the site and surrounding farms within a 1km radius and included in Section 6.2 of the report.

		that a desktop hydrological study was carried out using a 2 km search radius around the property boundary to determine if there are any groundwater uses in the area and that this did not include any field work. Table 5 is a summary of the NGA boreholes which our client submits is wholly inadequate. This inadequacy is conceded at the foot of page 15 where the specialist states that "(i)t must be noted that the NGA data is not always accurate and it is therefore used in conjunction with site data to help conceptualise the hydrogeological setting". In Table 6, the specialist lists a summary of WARMS borehole details and it is to be noted that all the boreholes bar one (for industrial use) are listed for irrigation purposes. Again, having regard to our client's position which was made clear in the p-a DSR, the absence of any reference to our client's boreholes in this table, is questioned. 5.35. In paragraph 6.2 on page 17, a hydrocensus is referred to. Apparently, a site visit was conducted on 26 January 2022 and the specialist then states in the third paragraph of paragraph 6.2 that "After a complete hydrocensus was carried out it was established that groundwater abstraction is taking place in the area. It should be noted that the hydrocensus occurred during the COVID-19 pandemic which made obtaining data difficult. … it was reported that yields are generally low in the area … " 5.36. We note that reference is made in the final paragraph on page 17 to borehole HBH14 which is one of our client's boreholes. We also note from Table 7 commencing on page 18 that reference is made to our client's borehole HBH8 being welded shut and not in use, and to its boreholes HBH13 and HBH14. In addition, photographs of all 3 are included. It is not certain whether this information was obtained from any of our client's representatives or how the information in the hydrocensus was obtained but clearly, if, as is stated on page 17, a complete hydrocensus was conducted, then the additional borehole marked by our client on Annexure "A" hereto, ought to have been included. Furthermore, borehole HBH7 which is listed on page 20 and for which a photograph is included, should have had in the "comment" column, a reference to this borehole being a County Fair borehole in current use.	5.34. GEOSS response: The desktop study is used to inform a targeted approach for the site visit and to provide an indication of the degree of groundwater usage in a study area. The data obtained during the desktop assessment is then verified in the field, and additional information is then included in the hydrocensus section. Unfortunately, there are limitations with the government databases which are highlighted in the report. Data is presented as it was listed on the DWS WARMS and NGA datasets. 5.35. The comment is noted 5.36. GEOSS response: The comment for borehole HBH7 in the report can be updated to reflect that this borehole is a County Fair borehole currently in use. The map detailing the surrounding boreholes can be updated to reflect the additional borehole that was unfortunately missed during the hydrocensus.

		5.37. On page 41, the specialist makes it clear that the risk assessment only relates to groundwater abstraction and mentions two potential impacts, namely, the risk of depletion of groundwater due to over-abstraction and the risk of groundwater quality deterioration as a result of over-abstraction.	5.37. Noted, the evaluation of the impacts associated with the other water uses as it pertains to groundwater will be included in the EIA specialist report.
		5.38. In paragraph 8.1, the specialist states that over-abstraction of groundwater is likely to lead to depletion of water levels in the area over time and that this can cause damage to the aquifer in addition to possibly impacting neighbouring groundwater users. The specialist states further that "(s)ince there is considerable groundwater use in the area it is essential that the borehole is well managed and does not over-abstract to ensure impact on the neighbouring properties does not occur".	5.38. The comment is noted.
		5.39. In Table 17 on page 42, the recommended mitigation measure for over-abstraction is set out. It is suggested that monitoring information must be assessed regularly (it is suggested that this be monthly). If the water level in the boreholes drops below the dynamic water level, abstraction will be immediately reduced by 10%. This would be for normal rainfall events. Monitoring must persist and if after 30 days the water level in the borehole does not recover, abstraction must be reduced by a further 10% and this process must continue until the water level is stable. Our client's concern for this mitigation measure is that the incremental 10% reductions may be too little too late and suggests that in the event of the levels persisting after the initial 10% reduction, that further reductions in excess of 10% be implemented and if the low levels persist for more than 60 days, abstraction be stopped until the levels have been restored.	5.39. GEOSS response: Agreed, the proposed measures can be considered.
		5.40. In Table 18 on page 44, a similar method of mitigation is proposed if it is observed that an increase of 25% in electrical conductivity is observed. Such deterioration in the quality of the water, especially considering the low level reflected in respect of our client's borehole HBH14, leads our client to suggest that a similar mitigation measure as suggested by us above, be prescribed.	5.40. GEOSS response: It can also be suggested that a Groundwater Monitoring Committee be established to review the monitoring data to ensure that all parties manage the groundwater resource optimally.
		Comments on the WULA Technical Report	
		5.41. Under the heading Sewerage Management and Treatment on page 20, it is noted that capacity exists at the Fisantekraal waste water treatment	

		works to accept the flows from the proposed project. The fact that the network would need to be expanded is a cost that must be borne by the project proponent is not one that should impact negatively on this option being followed.	5.41. The comment is noted
		5.42. On page 21, the two options contemplated to service the development are set out. As stated elsewhere in these comments and indeed in our client's comments on the p-a DSR, our client opposes in the strongest terms Option 2 being the construction of an on-site sewerage treatment plant. The risks of such a plant attracting not only wild birds but flies and rodents which are all known vectors of bacteria, will seriously compromise our client's biosecurity and cannot be countenanced at all. If the project is to be authorised at all, which for obvious reasons our client opposes, our client suggests that Option 1 be the only option authorised by the competent authorities.	5.42. The comment is noted. The two options are regarded as alternatives to be assessed in the EIA phase .
		5.43. In Section 16 of the report commencing on page 133 and following, the provisions of Section 27(1) of the National Water Act are addressed. We do not intend engaging extensively with the author's analysis of Section 27(1) but point out the following:	5.43. The comment is noted
		5.43.1. The analysis on page 133 relating to the need to redress the results of past racial and gender discrimination is rather contrived. An abstraction licence for the project by no stretch of the imagination satisfies this provision set out in Section 27(1)(b). No direct benefit will avail any historically disadvantaged individuals but will merely advantage the privileged directors of the project company.	5.43.1. The comment is noted.
		5.43.2. The authors of the report seek to justify this consideration by reference to the socio-economic report and the potential for job opportunities for the impoverished Fisantekraal community. To some extent this is being borrowed from the further factors set out	5.43.2. The comment is noted

		in Section 27(1)(c) and (d) of the Act which is in any event covered in the following pages of the report. 5.43.3. But nowhere in the report or the socio-economic scoping report is any consideration given to our client's own workforce and the potential impact on them losing their employment as a result of the project being authorised. We say so for the reason that our client's operation adjacent to the proposed project cannot coexist alongside the proposed project and if our client's laying farm were to be relocated elsewhere, its workforce, drawn from the Fisantekraal community, would all lose their employment. In this regard, we refer to what we set out in this particular regard in our comments on the p-a DSR. 5.43.4. On page 141 of the report reference is made to Section 27(1)(f) and it is noted that the technical document will be updated upon receipt of the final impact assessments and quantum risk ratings. We have already dealt rather extensively with the potential for the water uses applied for in the WULA and in particular the application for an abstraction licence to negatively impact on our client's own water security and we will deal further with this aspect when the assessment phase is subjected to public comment. 5.43.5. In dealing with Section 27(1) of the Act the Supreme Court of Appeal in the case of A S Makhanya NO & Another v Goede Wellington Boerdery (Pty) Ltd [2012] ZA SCA 205 held at paragraph [39] that none of the factors stipulated in Section 27(1) of the Act takes any precedence over the other and at paragraph [40] held that the factors listed in Section 27(1) fall to be assessed "by finding an appropriate balance after evaluating all the factors expressly provided for". This principle should be borne in mind by the authors of this report when updating it for the EIA phase. Conclusion 5.44. For all the reasons set out in our letters of 7 December 2023 and herein, our client objects to the proposed project but is willing to engage with CWA, as it has stated before, to find a solution that will allow the project to proceed and for our client's operations on the adjacent farm to be	5.43.3. The comment is noted. A socio-economic Impact Assessment will be available whereby these impacts are assessed for consideration and comment by Registered I&APs in the Impact Assessment Phase. 5.43.4. The comment is noted. 5.43.5. The comment is noted. 5.44. CWA response: Refer to answer in 5.1.1

		relocated at no cost to our client. In this regard, our client suggests that CWA engage with its representatives in order to find a solution that works for both sides which seems to be the indication made in your comments referred to in paragraph 2 on page 177 of the Comments and Responses Report. 6. Kindly acknowledge receipt hereof and keep us posted as to further developments in this application in due course. **ANNEXURE "A"** *Groundwater Impact Assessment Scoping Report for the Proposed Cape Winelands Airport, Fisantekraal, Western Cape.*  *Map 3: The study site with the property boundary, hydrocensus, NGA and WARMS boreholes superimposed on an aerial photograph.* GEOSS Report No. 2023/07-03 v1.2 08 March 2024 9	6. Receipt was acknowledged by the EAP.

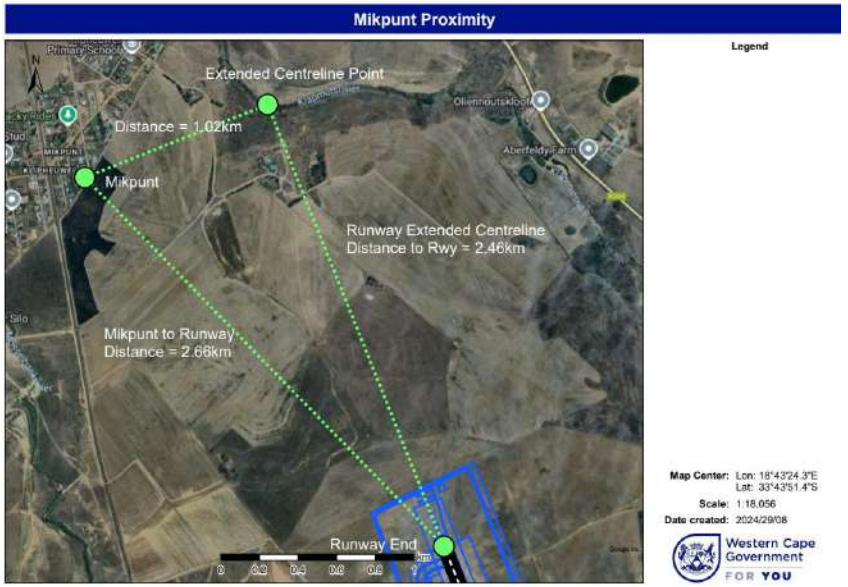
228	Arabel McClelland - **DEADP Directorate: Pollution and Chemicals Management**	*Email dated 23 August 2024:* 1. Please find attached comment from the Directorate: Pollution and Chemicals Management on the abovementioned Draft Scoping Report. Should you have any queries, please do not hesitate to contact us. *Letter received via email dated 23 August 2024:* 2. The Directorate: Pollution and Chemicals Management (D: PCM) acknowledges receipt of the Draft Scoping Report (DSR) on 23 July 2024. Please find comment from the D: PCM as follows: 2.1. This Directorate supports the Plan of Study for the Environmental Impact Assessment (EIA) and the associated specialist studies that will inform potential impacts to be assessed during the EIA phase. 2.2. The D: PCM will provide further comment in the EIA phase. 3. The Department reserves the right to revise or withdraw comments or request further information based on any information received.	E-mail response 26 August 2024: 1. Good evening Arabel Thank you for the email and the comments received 2. 2.1. The comment is noted 2.2. Noted 3. Noted
229	Brian Gawne - **Local Resident**	*Email dated 23 August 2024:* 1. Please note my reservations regarding the added noise pollution that as an Uitzicht resident in Durbanville we will be forced to endure. Durbanville is already directly under the flight paths of almost all local destinations. Flights start taking off at 6.00 am and sometimes 3.00 am for the cargo planes which impact on our otherwise peaceful town as they climb to gain altitude. Thereafter we have a short break before the JHB and KZN flights start their landing descents over us. This continues almost everyday seven days a week, wind dependent. Should jet engined aircraft taking off and landing a mere six km away at CWA as proposed in the future be inflicked on us, extreme noise pollution will be unavoidable and unacceptable.	*Email response provided on 23 August 2024:* 1. Thank you for the email. You will be registered as an I&AP for the proposed project and your comments recorded. *Response:* 1. The comment is noted. A Noise Impact Assessment forms part of the Impact Assessment Phase, and will be circulated to all registered I&APs for comment. 2. The comment is noted

		2. Finally my thanks to you all for allowing us the opportunity to voice our concerns and I trust your client will take our concerns into consideration in their future decisions.	
230	Henry du Plessis - **Local Businessowner**	*Email dated 26 August 2024:* 1. Please register me as an interested party for the airport. I own a hotel business in the Durbanville area ([redacted]) and would like to remain appraised of developments.	*Email response provided 26 August 2024:* 1. Thank you for the email. You will be registered as an I&AP for the proposed project.
231	Carl Lourenz	*Email dated 25 August 2024:* 1. I would like to formally comment on the Environmental impact this Expansion would have on the residents of the close by surrounding areas, I feel that this expansion will do more harm than good, as this project will not help the communities around this area, but will expose and exploit them for the benefit, of the select few that do not reside near the new proposed airport. The original airport was built long ago for small aircrafts way before there was much residential housing in the area in 1943, 81 years later millions of families now call this area home, many have moved to the winelands for a healthier, peaceful lifestyle away from the hustle and bustle of the CBD, this area has now expanded to the edges of the New Proposed Airport. If the expansion was to be completed this would directly affect the residents' constitutional rights as stated in Act 108, where according to S24 of the South African constitution everyone has a right to an environment that is not harmful to their health or wellbeing. Unfortunately, having an Airport less then 5km from major residential areas would have devastating effects on noise and air population, these effects impact communities within a 10km radius the most, and there are hundreds of thousands of people living within this 10km radius now in 2024. These families were not consulted with in regards to this expansion, and have not be given adequate information or knowledge of the expansion and the risk	*Email response dated 26 August 2024:* 1. Thank you for the email. You will be registered as an I&AP for the proposed project and your comments recorded. *Response:* 1. The comments are noted. Noise and Air Quality Impact Assessment forms part of the Impact Assessment Phase of the proposed project and will be circulated to all registered I&APs for comment. The Public Participation Process conducted for the proposed project (8 November to 8 December 2023) included during the pre-application Scoping phase: • Advertisements in three local papers (in Afrikaans and English and Xhosa) • Site notices at three locations around the site (in Afrikaans and English and Xhosa) • E-mail notification to adjacent landowners and all identified I&APs

		it poses to their constitutional rights to an environment that is not harmful to their health or wellbeing. I propose a new location be found at lease 30km away from residential areas before the project starts as this would be a fair outcome for all people, money is not worth the loss of children's wellbeing and people's health. If the people that want a new airport actually cared about people, children, families and the next generation, this airport will be developed away from close proximity to residential areas where, people live. The City of Cape Town should support an airport that benefits all residents of Cape Town and not just the select few that have the means to create this airport. I plead to all reading this comment to find it in your power to do the right thing. Let's move this to a better location that has less of a long term negative environmental impact while we still can, for the benefit of all.	• Placement of all information on the PHS Consulting website for access and comment • Public meeting on 8 May 2024 • Various focus group meetings The Public Participation Process conducted for the proposed project (23 July to 26 August) included during the in-process Scoping phase: • Advertisement in Tygerburger • Site notices at three locations around the site (in English) • E-mail notification to all registered I&APs • Placement of all information on the PHS Consulting website for access and comment The further comments are noted.
232	Etienne Roux – **DEADP Directorate: Air Quality Management**	*Email dated 26 August 2024:* 1. I trust you are well. Please find attached our comments on the Draft Scoping Report for the proposed Cape Winelands Airport. Kindly confirm receipt of this email. *Letter received via email dated 26 August 2024:* 1. The Directorate: Air Quality Management ("the Directorate") has reviewed the above-mentioned documentation, as received on 29 July 2024. 1.1. The Directorate notes that the Draft Environmental Impact Assessment Report will include the Atmospheric Impact Assessment Report, as well as a Noise Impact Assessment Report during the Environmental Impact Assessment phase. 1.2. The Directorate will provide further comment on the proposed application once the Draft Environmental Impact Assessment Report,	*Email response dated 26 August 2024:* 1. I confirm receipt of the email and the contents thereof Response: 1. 1.1. Noted 1.2. Noted

		the associated Specialist Reports, and the Environmental Management Programme, have been received. 2. GENERAL 2.1. Kindly be advised that the Air Quality Officer (AQO) for the Cape Town Metropolitan Municipality (Mr. Ian Gildenhuys) is to be engaged regarding the proposed activity, given its location within their jurisdictional area. Mr. Gildenhuys can be reached on (021) 44 48364 or Ian.Gildenhuys@capetown.gov.za. 2.2. The Department would like to draw your attention to Section 28 of the National Environmental Management Act No. 107 of 1998 (NEMA), i.e. "Duty of Care" which states that: "Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorized by law or cannot reasonably be avoided or stopped, to minimize and rectify such pollution or degradation of the environment." 2.3. Please note that the above-mentioned recommendations do not pre-empt the outcome of the application. 2.4. No information provided, views expressed and/or comments made by the DEA&DP, D: AQM should in any way be seen as an indication or confirmation: 2.4.1. that additional information or documents will not be requested; or 2.4.2. of the outcome of any application submitted to the authorities. 2.5. Kindly be informed that the D: AQM reserves the right to review the above-mentioned comments, should additional information come to light. 3. Please contact Etienne Roux (Etienne.Roux@westerncape.gov.za) should you have any further queries in this regard.	2. 2.1. The comment and contact details are noted. 2.2. The comment is noted 2.3. Noted 2.4. Noted 2.5. Noted 3. Noted

		4. Please note that D: AQM has a dedicated email address reserved for all EIA related correspondences, DEADP.AQM@westerncape.gov.za. Kindly use this email for any future correspondence	4. Noted
235	Arnel Hanekom - **Local Resident**	*Email dated 26 August 2024:* 1. Francouis Naude compiled a document re the Winelands Airport affecting Mikpunt. I have the exact concerns and support his questions and awaiting feedback from PHS Consult. Awaiting your response. *Letter received via email dated 26 August 2024 (Also refer to comment no 224):* 1. I would like to comment and be added as a I&AP. 2. My general concerns regarding the above expansion like all others are noise, pollution, congestion and crime. I hope that they will be answered by questions other have asked 3. My specific concerns are that PHS consulting and developers are really trying to tiptoe or not to mention the impact the proposed expansion will have on MIKPUNT. My late participation in the whole airports matter, is that I have only now realised how near to MIKPUNT this expansion will come. I do know where the current Fisantekraal airport (plot) is and have no problem with any activities or expansions taking place there. I do however have a huge problem and concern with the proposed runway extension and additional plots of land acquired to do this. For all developers and professionals involved in this project it should be an absolute no brainer that areas, that will be most affected especially with noise and air quality will be those closest to the end of runways. I'm not a professional but rude measurement and calculation based on your pictures and drawings (which always just ends before MIKPUNT) put MIKPUNT in a direct line with the new proposed runway. The end of runway and nearest	*Email response dated 26 August 2024:* 1. Thank you for the email. You will be registered as I&AP for the proposed project and your comments recorded. EAP Response to letter: 1. You have been registered as an I&AP for the proposed project. 2. The concerns are noted. The EIA process includes the assessment of a Noise Impact Assessment, Air Quality Impact Assessment, Traffic Impact Assessment and Socio- economic Impact assessment, which will be circulated to all registered I&APs during the Impact Assessment commenting period. 3. The concerns are noted. Impacts associated with the proposed project will be determined and assessed during the Impact Assessment Phase and circulated to all registered I&APs during the Impact Assessment commenting period.

		residence to my calculations are roughly 2000-2500meter apart. This alignment also put us directly downwind of the airport on prevailing wind directions. Summarised this means that jets will pass directly over MIKPUNT at a very low altitude (120m at on a 3-degree glide slope 2000m from end off runway. It also means that all noise and air pollution from ALL the activities will be carried directly to us on the prevailing wind. 4. From the above I need to ask you the following: 4.1. Have PHS consulting, the developers and all contracted professionals contracted to do all feasibility and environmental studies have realised/or have been briefed, that off all affected areas MIKPUNT will probably be affected the most. 4.2. Can PHS please confirm on a detailed map with verified distance between end of runway and residences of MIKPUNT and how this compares to the international norm	4. 4.1. Impacts associated with the proposed project will be determined and assessed during the Impact Assessment Phase and circulated to all registered I&APs during the Impact Assessment commenting period. 4.2. CWA Response: The comment is noted. See image below:  The distance between the northern runway end and Mikpunt is approximately 2.66km. Mikpunt is also not in the direct approach of the

		4.3. Can PHS please confirm the flight path in relation to MIKPUNT from aircraft either landing or taking off. This must include height above ground and distance to nearest residence 4.4. Can PHS please motivate why a public meeting in MIKPUNT have not been organised based on the assumption/fact that this will be the most affected area.	proposed runway, but rather at approximately 23 degrees west of the proposed runway approach. International examples of distance between nearest residence and runway end (approximately): • Cape Town Intl Airport Rwy 01 – 799m • OR Tambo Rwy 21L – 355m • OR Tambo Rwy 21R – 449m • London Heathrow Rwy 27L – 482m • New York JFK Rwy 22L – 1.07km Mikpunt is substantially further away from the proposed CWA runway than compared to the above (international norm). It must also be noted that the list of above airports is substantially larger and busier than the proposed CWA, expected to process up to 20x more traffic than CWA in the case of Heathrow. 4.3. CWA Response: See image above which is an approximation. Neither flight paths nor approach/takeoff slopes have been finalised yet. Assuming a 3-degree glide slope for landings, and assuming that an aircraft will land 200m into the runway, it implies that an aircraft would be 140m above the runway height. Note however, that the runway itself is approximately 32m elevated relative to Mikpunt and thus the aircraft at the point in question would be 172m above the nearest residence. Regarding noise, the resultant impacts are being assessed and will be included in the Environmental Impact Reports. 4.4. EAP response: A public meeting was held at the most central community facility with capacity to host a large crowd in the area. The Fisantekraal Community Hall is accessible to Mikpunt residents who we do understand was present at the 8 May Public Meeting.

			We are about to enter into the impact phase. During this phase all impacts will be considered and will provide a clear indication of the extent of which communities are and not impacted. It is too early to offer any indication of the extent to which Mikpunt is affected. There are plans for an open public day in November this year, at a venue accessible to Mikpunt residents, where impacts can be further discussed. As a registered I&AP you will receive notice thereof.
		4.5. Based on the noise report on your website the MIKPUNT readings were the lowest of all sites. Can PHS please supply us with the following. 4.5.1. The calculated change in DB readings expected when airport is in full operation. This can be based on readings taken from LANSERIA from same distance and directly inline with runway from end (point 2) 4.5.2. Will this db. reading still fall in the rural residential bracket as per your report. 4.5.3. Can your professional report do a study or at least mention the effect prevailing winds have on noise pollution and how this will enhance the noise pollution effect on MIKPUNT	4.5. 4.5.1. The Noise Impact assessment with associated Noise Cones will be available to all registered I&APs during the Impact Assessment Phase of the proposed project. 4.5.2. The Noise Impact assessment with associated Noise Cones will be available to all registered I&APs during the Impact Assessment Phase of the proposed project. 4.5.3. The comment is noted
		4.6. The air pollution report is very vague. Can PHS do a specific report relating to the air pollution effect it will have on a residence area 2000m, directly inline and downwind of a regional airport as planned. 4.7. Airplane accidents are more prone to happen during or directly after landing or take off. With MIKPUNT being directly inline and 2000m front end off runway we are in direct danger from this. I do not see this point being mentioned at all. 4.8. What alternates have the developers and PHS looked at to minimise the nearness and the direct inline problem MIKPUNT pose to the development. Can the runway angle be altered slightly to miss MIKPUNT. Can the runway be moved over the Fisantekraal road more towards the	4.6. The Baseline Air Quality report is done by an independent specialist company DDA Engineering. 4.7. This comment is noted. 4.8. The comment is noted. The placement and orientation of the runway is through detailed design and incorporates various parameters such as temperature, wind direction, topography, required airspace integration, transport infrastructure and airspace exclusion zones.

		NI side to even out the distance and affect to acceptable level for both sides. 4.9. Property values will in general rise with development, but in MIKPUNT's case it might very easily decline. People want to live near the airport but not touching distance from the runway. What guarantees can the developers give MIKPUNT property owners that they will not loose value. Are there steps in place should this happen. 5. Summarised. Most residents including myself, have invested in property in MIKPUNT due to the rural and tranquil lifestyle it offers. Must of us is under no illusion that the city and development will catch up with us due time. I am a frequent flier and would appreciate the convenience it brings. I'm very willing to concede to some added noise, traffic, pollution, crime etch coming with any development. However, I'm NOT willing to go from rural tranquil life to living directly under and very near to and international airport runway. This will not slightly or moderately affect our way of living; it will drastically and completely change it from rural and tranquil to living in the most undesired spot in any city imaginable. 6. I'm opposed to the Airport development due to the reasons and facts above. I'm open to be convinced otherwise with facts and guarantees. I await your prompt response to my questions.	CWA is an existing operational and licensed airport that has been in existence for 80 years, operating at the current site. 4.9. CWA Response: The concern regarding property values is noted. Per previous comments, Mikpunt is however not in touching distance from the runway, but it appears that Mikpunt is actually substantially further away from the runway than occurs at other airports around the world. 5. The comment is noted. 6. The comment is noted.

236	Lelethu Zepe - **Department of Water and Sanitation**	*Email dated 26 August 2024:* 1. Kindly find as attached the feedback letter from the Department of Water & Sanitation regarding comments as per the subject matter. Please do not hesitate to contact our office should there be any queries. *Letter received via email dated 26 August 2024:* DRAFT SCOPING REPORT FOR THE PROPOSED EXPANSION OF CAPE WINELANDS AIRPORTON ON 10/724, RE/724 & 3/724 FISANTEKRAAL SITUATED WITHIN THE G21E QUATERNARY CATCHMENT. 2. Reference is made to the above-mentioned proposal dated July 2024 prepared by PHS Consulting. This Department has perused the abovementioned documents for the proposed Cape Winelands airport expansion and has the following comments: 2.1. The impacts of the proposal in relation to the water resources on the proposed site is being assessed by the Department in terms of section 40 of the National Water Act 1998 (Act 36 of 1998) as Amended, with reference number WU32620. 2.2. A water use authorisation and registration must be obtained prior to commencing with the activities. 2.3. No surface, ground or storm water may be polluted as a result of activities on the site. In the event that pollution does occur, this Department must be informed immediately. The person who owns, controls, occupies or uses the land in question is responsible for taking measures to prevent any occurrence of pollution to water resources. 2.4. All the requirements of the National Water Act, 1998 (Act 36 of 1998) regarding water use and pollution management must be adhered to at all times. 3. The comments issued shall not be construed as exempting the municipality from compliance with the provisions of any other applicable Act, Ordinance, Regulation or By-law.	*Email response dated 26 August 2024:* 1. Thank you for the email. Contents thereof is noted and will be recorded. Response to letter: 2.1 Noted 2.2 Noted and will be complied with 2.3 Noted and will be complied with 2.4 Noted and will be complied with 3. Noted

		4. Please note that this Department reserves the right to amend and/or add to the comments made above in the light of subsequent information received. Please do not hesitate to contact the above office should there be any queries	4. Noted
237	Karla Burger - **Elco Property Development**	*Email dated 26 August 2024:* 1. The below has reference. Please see herewith attached comments for your records. We reserve the right to provide further comments and input once more detailed reports are available. *Email dated 26 August 2024:* 2. Below has reference. Please find herewith the correct Power of Attorney to be replaced by the previous one sent. *The following documents were shared and have been included as Appendix E (C237):* • *Resolutions* • *Power of Attorney* *Letter received via email dated 26 August 2024:* COMMENT ON IN-PROCESS DRAFT SCOPING REPORT: PROPOSED EXPANSION OF THE CAPE WINELANDS AIRPORT ON PORTION 10 AND 23 OF FARM 724, PORTION 7 OF FARM 942, REMAINDER, PORTION 3 AND 4 OF FARM 474 (16/3/3/6/7/2/A5/20/2209/23) 3. We hereby provide our comment on behalf of our client to the above-mentioned proposal. 4. The approved Bella Riva development is located immediately west of the proposed development (Portion 2 and Remainder of Farm 123). It has been	*Email response provided 26 August 2024:* 1. Thank you for the email and comments. *Email response provided 26 August 2024:* 2. We will replace the POA with the correct version. *Response to Letter:* 3. Noted

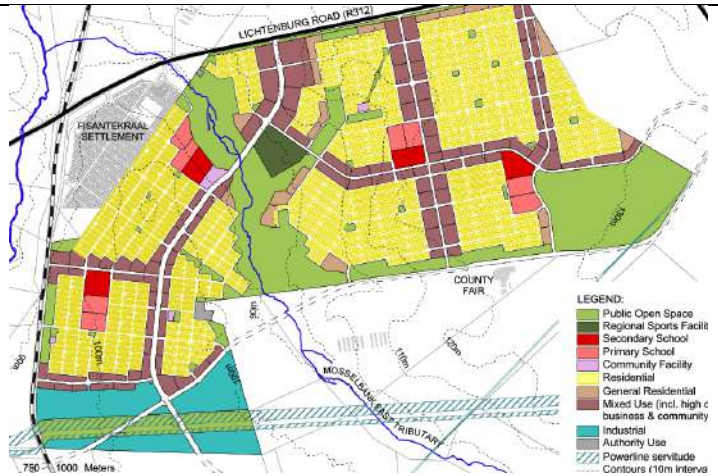
		included in the Urban Edge according to the revised City of Cape Town Municipal Spatial Development Framework and Northern District Plan as of 2023.	4. Noted
		5. It is noted that according to page 353 of the In-Process Draft Scoping Report (July 2024) the Noise Contours will be included in the Impact Assessment Phase of the development. According to page 401 the terms of reference of the Noise Impact Assessment states that the impact will be assessed on the surrounding communities. The terms of reference for the specialist noise impact assessment, section 11.4.3 of the In-application Draft Scoping Report, should be expanded to include the approved Bella Riva development as a surrounding community. It should be included in the assessment as if the Bella Riva development has already been developed, similar to how the impacts on existing communities such as Fisantekraal will be considered, since the Bella Riva development has been approved prior to the airport. Noise-sensitive receptors within the Bella Riva approved development, such as the schools and crèches, should also be included in this assessment as if it has already been constructed, to assess the potential noise impacts on these receptors.	5. EAP comment: A Noise Impact Assessment forms part of the Impact Assessment Phase, and will be circulated to all registered I&APs for comment.
		6. The proposed Winelands Airport must consider Bella Riva's status as an approved housing development and thoroughly assess the impact of noise levels. It's imperative to prioritise achieving zero noise impact within Bella Riva's boundaries to uphold its appeal as a housing development, which will also safeguard the City's greater plans of residential expansion along the North-South railway line.	6. EAP comment: A Noise Impact Assessment forms part of the Impact Assessment Phase, and will be circulated to all registered I&APs for comment.
		7. Other aspects that will need to be addressed in relation to its impact on Bella Riva: • Scale, position and alignment of the runway; • Existence and placement of the proposed bioreactor; • Positioning and alignment of access along Lucullus Avenue.	7. The comment and aspects listed are noted.
		8. Bella Riva will bring significant infrastructure to the area, including electrical substation, water pipelines, bridge, and road infrastructure. Specifically the bridge and east-west road traversing Bella Riva which is vital for the Airport's	8. The comment is noted.

		accessibility. We have to emphasise that these infrastructure costs can only be justified if we are assured there will be no additional burdens on our land. 9. The response to date to the above issues has been limited and has not resolved any of the concerns. We reserve the right to provide further comments and input once more detailed reports are available. Trust the abovementioned suffices.	9. All registered I&APs will be afforded further commenting opportunity within the Impact Assessment Phase.
238	Danielle Cronje - **Garden Cities**	*Email dated 26 August 2024:* 1. I trust you are well. Further to your notification, dated the 23rd July 2024, regarding the Proposed Expansion of Cape Winelands Airfield; referenced Scoping for Public Participation (DEA&DP ref: 16/3/3/6/7/2/A5/20/2209/23), please find attached Garden Cities' letter of objection for formal submission to PHS Consulting, the latter being self-explanatory. Attachments include: • Cover Letter • Formal Comments to scoping report • Appendix I • Appendix II • SANS10103 Extract • Anton Bredell Letter Kindly confirm receipt of our letter.	*Email response provided 26 August 2024:* 1. Thank you for the email. The contents and attachments are noted and will be recorded. *CWA Response:* CWA is fully dedicated to establishing a strong and collaborative partnership with Garden Cities, as demonstrated by our extensive engagements over the last four years. We have had multiple meetings with your executive team and have also engaged with your non-executive directors, with the majority of these interactions initiated by CWA. During this time, we have presented multiple proposals, including offers to acquire land, underscoring our genuine commitment to working together. We are confident that continued collaboration will lead to mutually beneficial outcomes for both our organisations and the communities we serve.
		Cover Letter received via email dated 26 August 2024: LETTER OF OBJECTION – In Process Draft Scoping PROPOSED EXPANSION OF FISANTEKRAAL AIRFIELD (AKA CAPE WINELANDS AIRFIELD) DEADP REF NO 16/3/3/6/7/2/A5/20/2209/23 AND DWS REF NO WU33620 1. Further to your formal/advertised notification for the Scoping/EIA process and the associated Public Participation Process, relating to the various activities listed to facilitate a phased development to increase the existing Fisantekraal Airfield (aka CWA), dated the 23rd July 2024, DEA&DP Ref.	*Response to letter:* 1. Noted

		16/3/3/6/7/2/A5/20/2209/23 & DWS Ref. WU33620, to develop various facilities and infrastructure, please find attached our detailed letter of objection dealing with several concerning aspects relating to same. 2. Some of the concerns relating to: • Our rebuttal to some of the Pre-Application Draft Scoping Report PHS/CWA responses, based on our letter of objection, dated the 05th December 2023. 3. Comments to the Draft Scoping Report: • Administration Related • Project Context, Need and Desirability, Sustainability and Climate Change o Need and Desirability o Alternate Airport for Fuel planning and environmental savings o Commercial Property Development – • Project Description o The Development o Architectural Design Guideline o Land Use and Zoning – • Airport Access - comment at transport section o Billboards and Advertising o Bulk Electricity o Bulk Portable Water o Sewer Management and Treatment o Construction of a sewage treatment plant o Solid Waste Management o Stormwater Management Strategy	2. Noted 3. Noted

		○ External and Internal Road Design ○ Bulk Aviation Fuel farm and Fuel facilities • OVERVIEW OF THE RECEIVING ENVIRONMENT ○ Noise Study ○ Faunal and avifaunal o Existing Visual Landscape ○ Alternatives ○ Air Quality Impacts ○ Botanical Impacts ○ Freshwater impacts ○ Wetland off set issues ○ Potential Heritage Impacts ○ Potential Transport Impact • Further Additional Comments	
		Formal comments to the draft scoping report received via email dated 26 August 2024: 1. RESPONSE TO EAP'S COMMENTS (APPENDIX 30) PRE-APPLICATION DRAFT SCOPING REPORT 1.1. Firstly, the tone in which is used to respond to the comments does not reflect the collaborative approach mentioned in the comments and we make reference to the following comments: "It therefore serves no purpose to use the current Environmental Authorisation process to debate a previously approved rezoning further. Should Garden Cities not agree with the CoCT decision, it should have reviewed the CoCT appeal decision in the High Court three years ago".	*Response to formal comments:* 1. 1.1. Noted. *CWA Response:* CWA and Garden Cities (GC) need to focus on the future and align their efforts with long-term objectives. Continuing to use the current Environmental Authorization process to revisit or debate a previously approved rezoning is counterproductive. It is crucial to move forward with the development plans that have already been set in motion, ensuring that future discussions and decisions are geared towards innovation and sustainable progress rather than revisiting settled matters.

			CWA is fully committed to building a robust and collaborative partnership with Garden Cities, as evidenced by our extensive engagements over the past four years.
		1.2. Response to the following comments: "City's Appeal Authority dismissed the appeal by Garden Cities on 09 February 2021, and the Municipal Planning Tribunal's decision to unanimously approve the rezoning and consent stands." Garden City's attempted to highlight and remind the CoCT and the applicant of existing rights and approvals that were obtained when the rezoning was applied for by clearly defining the parameters of the Greenville Garden City concept plan and submitting same to prevent conflicting land uses of occurring. We note the comment but the fact of the matter remains that the further development the airport vehemently impacts on the existing land use intentions and rights.	1.2. Noted. CWA response: CWA and Garden Cities (GC) should focus on future goals rather than revisiting past decisions. GC argues they reminded the City of Cape Town (CoCT) of their rights from the initial rezoning of the airport to Transport 1 by submitting the Greenville concept plan to prevent conflicting land uses. However, CWA views this plan as merely conceptual and inadequate for resolving land use conflicts. Additionally, CoCT has confirmed that the zoning and rights on erf 4 have lapsed since the original rezoning. Given these developments, it's unproductive to use the current Environmental Authorization process to debate previously settled matters. following purposes: Property description: ERF 4, GREENVILLE GARDEN CITY Physical address: LICHTENBURG ROAD, GREENVILLE GARDEN CITY Applicable Zoning scheme: City of Cape Town Development Management Scheme Zone: **AGRICULTURAL ZONE (AG)** Other previously approved use rights (if any): The rezoning of Erf 4, Greenville Garden City, issued under cover of the enclosed letter dated 3 December 2012, has lapsed. No submission has been made for the subdivision of Erf 4 within the 5 year time period allowed.
		1.3. Response to the following comments: "In Phase 4 of the application, which is where Garden Cities say they are most affected, there are 3600 residential opportunities, and it is clear from their site plan that none of the industrial or business GLA is located near Phase 4." We do not agree with this statement at all, as the concept plan clearing depicts residential opportunities, which is the land zoning most affected by the potential noise cones, the latter which still has not been provided, implying a complete revisit of the Greenville Garden City concept plan to convert the residential opportunities to industrial to accommodate the	1.3 CWA response: The original conceptual plan submitted by GC over a decade ago for Portion 2 of Erf 4, Greenville Garden City, has remained unchanged and thus is still considered a GC Concept. Currently, CWA holds only a zoning certificate for Erf 4, indicating this erf as zoned for agriculture, a status confirmed by the City of Cape Town's Surveyor General zoning viewer and the agricultural rates and taxes being paid. Although a rezoning for Erf 4 was issued in a letter dated 3 December 2012, it has since lapsed due to the failure to submit a subdivision within the additional 5-year period allowed, totalling 10 years, meaning the land retains its agricultural zoning.

		proposed expansion of the airfield, a concept plan which has already been approved by Province and City of Cape Town. The latter completely deviates from the initial intention of a multiple purpose residential development; again, resulting in potentially only a portion of the residential development being encapsulated by industrial zoned areas with the parties being impacted most on that being the poorest of poor people. 1.4. The applicant makes reference to intensive agriculture on Erf 4 should be seen in the light of as an interim measure whiles development and bulk services are rolled out. 1.5. Response to the following comments: "The proposed expansion project for CWA is subject to various national and international standards of design and safety, which must be adhered to by the applicant. The safety of surrounding communities form part of these considerations." Indicating that the applicant will adhere to the safety standards doesn't address the issues of: Garden Cities NPC (RF) 4 • The added external impacts; as a result of the airport's type and quantity of trip generations • High accident rates to the road leading to the airfield • Stray Cattle on busy roads	 1.4. Noted in context of 1.3 above. 1.5. The Impact Assessment phase for the proposed project includes a Traffic Impact Assessment. All registered I&APs will have a 30-day commenting opportunity to comment during this phase. *CWA Response:* GC would have conducted a Traffic Impact Assessment (TIA) to evaluate and mitigate potential impacts on the local transportation network for their own development. GC would have assessed existing traffic conditions, projected increases, and proposed measures such as road upgrades, safety interventions, and improved pedestrian infrastructure. The TIA would have also addressed concerns from taxi associations and public transport, ensuring integration and minimal disruption. CWA will take cognisance of phased traffic impact both developments have together.

		• Taxi Associations and Public Transport concerns • Additional traffic through Greenville Garden City and impact on pedestrians. 1.6. Response to the following comments: "Please note Garden Cities can't apply noise cones of another airport to this application, which leads to speculation and inaccurate conclusions" (p.14) In the absence of the critical information related to noise cones (that has been requested on several occasions and for an extended period) and based on the various social media and other media outlets, the applicant has repeatedly compared themselves to be in similar in nature and step up from the Cape Town International Airport, catering for similar and larger aircrafts and continued growth over the short-medium-long term period, ultimately resulting in similar noise cones as that of CTIA. Again, in the absence of said noise cones and to fully understand the potential impacts, Garden Cities had no other recourse than using CTIA's noise cones as a guide. We view the absence of the noise cones as a substantial oversight and flaw in the environmental process; especially considering the exciting rights being impacted on.	1.6. As previously stated, the Noise Impact Assessment will form part of the Impact Assessment Phase of the proposed project. All registered I&APs will have a 30-day commenting opportunity to comment during this phase. CWA additional response: As previously stated, the Noise Impact Assessment will form part of the Impact Assessment Phase of the proposed project. All registered I&APs will have a 30-day commenting opportunity to comment during this phase. Comparing CWA to Cape Town International Airport (CTIA) is not appropriate, as it doesn't account for the significant differences between the two developments. At CWA, we've never claimed to be similar in nature to CTIA. The operational scale, aircraft mix, and geographic considerations are distinctly different. The current absence of noise cone data should not be seen as a flaw or oversight in the environmental process. The environmental impact assessment is a thorough, phased approach where various factors, including noise impact, are comprehensively studied. The relevant noise cone data will be provided during this process, ensuring it is based on accurate and context-specific information rather than assumptions drawn from unrelated scenarios. Once available, this data will be shared and analysed in collaboration with all stakeholders, including GC, to address concerns with accurate and relevant information. CWA initiated a number of one-on-one focus meeting with the GC Executive over the last few months. During this time the above-mentioned was explained in person, during these meetings the CWA representatives kept the GC representatives updated on progress around key development matters i.e. planning, land and EIA. As neighbouring entities engagements are also happening on an

		1.7. Response to the following comments: "will be important to note at this time that the two runways, eventually a third i.e. 14-32, being terminated through what is proposed will have a positive impact in that it moves flight paths and noise away from the biggest and central portion of the planned Greenville development ." All engagements with applicant have made reference to the primary runway at an orientation of 01-19 and length of 3.5 km which perpendicularly coincides with our Greenville development and noise cones therefore impacting directly on our development, existing right and macro-planning. 2. GARDEN CITIES COMMENTS TO THE DRAFT SCOPING REPORT 2.1. ADMINISTRATION RELATED • Correct Greenlands to Greenville Garden City on page 110. "…and includes the Botfontein smallholdings, part of Brackenfell, Crammix, Scottsdene, Wallacedene, Bloekombos, Belmont Park, Kruisfontein smallholdings, Joostenbergvlakte and the area North thereof, Fisantekraal, Greenlands Garden Cities and the area known as Bella Riva." • Add abbreviations to list • COD (p. 164) • GVA • MARS • POS (p. 201) 2.2. PROJECT CONTEXT, NEED AND DESIRABILITY, SUSTAINABILITY AND CLIMATE CHANGE 2.2.1. NEED AND DESIRABILITY	ongoing basis around practical matters i.e. developing an integrated security plan with all key land owners and developers in the area. 1.7. CWA response: The proposed project involves a phased expansion of the existing Cape Winelands Airport. This development will include the realignment of the primary runway, oriented 01-19, with a length of 3.5 km. Additionally, the project will initially retain and refurbish the secondary cross runway, oriented 14-32, with a length of 700 meters. The ongoing scoping report, as emphasized in the executive summary and all preceding reports, has consistently outlined this phased approach to the airport's expansion. 2. GARDEN CITIES COMMENTS TO THE DRAFT SCOPING REPORT 2.1. ADMINISTRATION RELATED The Greenlands correction will be affected and additional abbreviations considered. 2.2. PROJECT CONTEXT, NEED AND DESIRABILITY, SUSTAINABILITY AND CLIMATE CHANGE 2.2.1. NEED AND DESIRABILITY CWA Response: Jobs created at airports span a wide range of sectors and skill levels, catering to

		• Refer to page 112 - "Embracing the role that CWA can play in improving lives and livelihoods it will actively work with the communities closest to the airport." o How will livelihoods be improved and who's livelihood's? Only a certain demographic will benefit from this project, people with business interest, people who are financially capable to travel and skilled labour. 2.2.2. ALTERNATE AIRPORT FOR FUEL PLANNING AND ENVIRONMENTAL SAVINGS • One of the motivations made by the applicant is that the expansion of the airport will bring a boost to the economy by means of more frequent flights to Cape Town. But also motivating to "boost efforts to decarbonize and reach net-carbon by 2050". How will the applicant be reducing emissions while motivating that more frequent flight to cape town will increase, adding to the emissions, irrespective of the fuel load and at the same time increasing the pay load and passenger count for each fight, resulting in additional vehicles and trucks on the road adding to emissions.	professionals, skilled workers, semi-skilled, and unskilled individuals. Professional roles include aviation management, engineering, finance, IT, and legal services, offering opportunities for those with specialized education and experience. Skilled positions encompass technical support, security, customer service, and logistics, requiring specific training and expertise. Semi-skilled jobs are found in ground handling, hospitality, retail, and transportation services, often requiring some level of experience or certification. Unskilled roles include general labour, janitorial work, and entry-level customer service, providing accessible employment opportunities for those with minimal qualifications. This diversity in job creation allows airports to significantly contribute to local employment, benefiting a wide range of workers across different sectors and skill levels 2.2.2. ALTERNATIVE AIRPORT FOR FUEL PLANNING AND ENVIRONMENTAL SAVINGS CWA Response: Independent experts in aeroplane performance modelling from Berlin, Germany, have assessed the advantages of utilizing Cape Winelands Airport (CWA) as a diversion airport for flights headed to Cape Town International Airport (CPT). Their analysis, which includes various aircraft types and routes, reveals significant savings in fuel weight and burn when CWA is chosen over other alternate airports like Port Elizabeth (PLZ) or Johannesburg (JNB). For certain aircraft, these savings can amount to as much as 10 tons in fuel uplift and 3 tons in fuel burn, leading to increased payload capacity, reduced operational costs, and substantial savings in carbon emissions due to burning less fuel, thereby providing commercial benefits for airlines. In discussions with airlines, CWA has confirmed that the financial savings and operational benefits made by

		2.2.3. COMMERCIAL PROPERTY DEVELOPMENT • The applicant references that they will unlock property development, this is however contrary to the potential impacts the flight paths and noise cones will have on existing housing developments rights. • Refer to page 120. "Direct jobs will be created that will benefit the communities in the surrounding areas during the construction and operational phases." o We would like to refer to the following article based on the above extract: o An estimated 60 000 jobs will be created with the expansion of the existing Cape Winelands Airport into a second major airport for Cape Town. (https://www.africaninsider.com/companies/takeoff-r7bn-cape-winelands-airport/) o Once again, the media is used to set a president, however in the reports it does not make reference to this number. How did the applicant get to this estimate that's shared with the public? What industries will these jobs be in? Is it skilled, semiskilled or unskilled labour. • "Note that for any development proposals located within the noise contour zones around the airport, the relevant authority should be consulted with regards to the applicable noise regulations and the type of development (i.e., residential or non- residential) that could be permitted to ensure that appropriate mitigation measures are put in	airlines make certain routes that were previously not financially feasible now viable, thereby opening new route opportunities. The report emphasizes that CWA's proximity to CPT is a crucial factor contributing to these savings and benefits. 2.2.3. COMMERCIAL PROPERTY DEVELOPMENT CWA response: An independent study on the economic and financial viability of CWA indicates that the project could generate approximately 34,778 direct, indirect, and induced employment opportunities during the initial construction phase and through periodic capital investments for upgrades and replacements over 20 years. This equates to an average of 1,700 job opportunities per year. Additionally, the project is projected to sustain around 58,651 direct, indirect, and induced employment opportunities over its first 20 years of operation. The distribution of jobs typically in airports includes a significant portion in the semi-skilled and unskilled categories. Approximately 30% to 35% of the positions are likely to be semi-skilled roles, such as ground handling staff, retail workers, and transportation services, while another 30% to 35% are unskilled positions, including baggage handlers, cleaners, and manual labourers. These roles, which require minimal training, provide accessible employment opportunities for a broad section of the workforce, highlighting the airport's crucial role in supporting the local economy and offering diverse job opportunities across various skill levels.

		place, where necessary. The AOLS (Airport Obstacle Limitation Services) limit building heights of developments located in proximity to the airport flight paths. These developments are subject to comment from the South African Civil Aviation Authority." o Garden Cities feels strongly that this item does not allow for existing rights and have to reverberate that Greenville's concept plans is already in place which will be impacted on. 2.3. PROJECT DESCRIPTION 2.3.1. ARCHITECTURAL DESIGN GUIDELINE • Refer to page 149 - We find it challenging to align the concept of a "Vibrant Community Centre" with the intended use and zoning of the airport. It is difficult to envision how the surrounding community would derive additional benefits from commercial activities situated within an airport precinct. 2.3.2. LAND USE AND ZONING • Refer to page 153 - "H & A Planning (2023) noted that the amendment of the urban development edge includes the existing airport but does not cover the proposed expansion of the airport. Airport runways should preferably be in areas of low intensity land use such as outside the urban development edge. However, the landside development of airports should be inside the edge. Site-specific circumstances for deviation from the MSDF will thus have to be motivated in terms of the Municipal Planning By-law during the application process" o In terms of the land use and zoning we note that the applicant acknowledges Garden Cities as an urban development to the south and that the planning consultants references the Northern District Spatial Plan and the MSDF, further	2.3. PROJECT DESCRIPTION 2.3.1. ARCHITECTURAL DESIGN GUIDELINE CWA Response: Refer 2.2.3 2.3.2. LAND USE AND ZONING CWA Response: • Site specific circumstances when evaluating the establishment of a second airport in Cape Town, such as the proposed Cape Winelands Airport (CWA), several key factors must be carefully assessed to ensure optimal performance while minimizing environmental and social impacts. Accessibility is paramount, with the airport ideally located within a 30 to 60-minute drive from the city centre, yet sufficiently distant from densely populated areas to minimize disruption. The site should be predominantly flat, located away from nature reserves and mountainous regions to avoid ecological damage and ensure safe flight operations. Additionally, it must be situated outside the Koeberg Nuclear exclusion zone to comply with safety regulations.

			highlighting specific spatial visions in terms of protecting certain areas from further expansion, protecting agricultural land from further expansion but at the same time note that the urban development edge is at this stage referenced as having to be possibly be amended. But as the same time the latest Northern District Spatial Plan already makes mention that the urban edge must be amended for the airport, this being done without any PPP or formal application to do so. We also don't see how the inclusion of the proposed airport landholdings result in rounding off the development north of the R312.	The selected location should offer ample space to accommodate current operations and future expansion while balancing cost considerations to maintain accessibility and affordability. Strong connectivity to highways, public transportation, and potentially rail networks is crucial to facilitate easy access. The site should also ensure clear airspace, avoiding areas prone to natural disasters, such as flood-prone regions. Minimizing social impacts is critical, with the airport's placement intended to promote economic development in less developed areas of the region. Adherence to aviation regulations, zoning laws, and alignment with Cape Town's long-term urban planning goals are essential. Considering these factors, the most suitable location for a second airport would be in a peripheral urban area. Such a location should provide the necessary balance of accessibility, space for expansion, and minimal environmental and community impact, supporting local economic growth while ensuring successful integration into the region. CWA contends that its current site, which was identified as a priority for an airport in 1943 before the development of Cape Town International Airport (CTIA), meets the criteria for location of a second airport in the city. However, CWA requires a deviation from the Municipal Spatial Development Framework (MSDF), where some of the runway infrastructure is outside of the urban edge. This is due to its strategic importance and unique site conditions that are required. This flexibility is crucial for developing critical infrastructure, accommodating growth, and implementing innovative strategies aligned with broader economic and social goals, such as regional development and job creation. The deviation will enable CWA to fulfil its role as a key economic driver

		• We find comment on page 154, number 2, contradictory in terms of rounding off the urban edge and preventing further development sprawl considering that with the further expansion of the urban edge is already suggested to specifically increase employment for the Fisantekraal Community taking due consideration of existing industrial areas where there is limited take up and already allowed for industrial areas in Greenville and surrounds. Is there a need for this amount of industrial areas, that is taking away opportunity for residential opportunities to address the critical housing crisis.	while addressing environmental and technical considerations. • While airports do have a significant industrial component, they are far more than just industrial areas. Airports are complex ecosystems that blend commerce, hospitality, and public spaces with their core transportation and logistics functions. They serve as gateways to cities and regions, offering retail, dining, and entertainment options, as well as cultural exhibits and green spaces. Additionally, airports are often designed with a strong emphasis on passenger experience, blending functionality with aesthetics. To view them as merely industrial overlooks the broader role they play in connecting people, fostering economic growth, and shaping the identity of the regions they serve Considering these factors, the most suitable location for a second airport would be in a peripheral urban area. Such a location should provide the necessary balance of accessibility, space for expansion, and minimal environmental and community impact, supporting local economic growth while ensuring successful integration into the region. CWA contends that its current site, which was identified as a priority for an airport in 1943 before the development of Cape Town International Airport (CTIA), meets the criteria for location of a second airport in the city. However, CWA requires a deviation from the Municipal Spatial Development Framework (MSDF), where some of the runway infrastructure is outside of the urban edge. This is due to its strategic importance and unique site conditions that are required. This flexibility is crucial for developing critical infrastructure, accommodating growth, and implementing innovative strategies aligned with broader economic and social goals, such as regional development and job creation. The deviation will enable CWA to fulfil its role as a key

		2.3.3. BULK ELECTRICITY • SOLAR PV PLANT o Collision with Solar Panels: Birds may mistake reflective solar panels for water bodies (a phenomenon known as the "lake effect"), leading to collisions that result in injury or death. • BIODIGESTERS AND BIOGAS o If the chicken manure is sourced locally, has this been confirmed with a supplier and a considered a sustainable source?	economic driver while addressing environmental and technical considerations. 2.3.3. BULK ELECTRICITY • SOLAR PV PLANT The comment re collision of birds with solar panels is noted. A 2016 study by the Argonne National Laboratory confirms that bird strikes through the lake effect is significantly lower than other human-related causes and lower than those at wind farms. While the "lake effect" phenomenon can lead to bird collisions with solar panels, the broader benefits of renewable energy far outweigh these losses. Renewable energy sources, such as solar power, play a crucial role in reducing greenhouse gas emissions, mitigating climate change, and decreasing reliance on fossil fuels, which are responsible for significant environmental degradation and harm to wildlife, including birds. By advancing renewable energy, we can create a cleaner, more sustainable future that ultimately benefits all forms of life on Earth, including birds, through healthier ecosystems and reduced global warming. Responsible design and mitigation efforts can further minimize the impact on birds, ensuring that the transition to renewable energy is as environmentally friendly as possible. • BIODIGESTERS AND BIOGAS o Various chicken manure sources have been identified. Confirmation with a potential supplier will only be post EA. CWA Response: Cape Winelands Airport (CWA) will focus on using energy crops as the primary feedstock for its

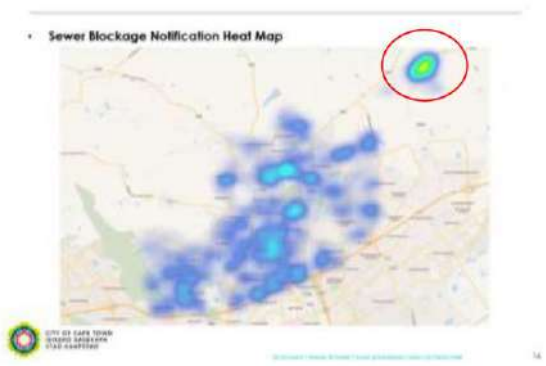
			biodigester, as these crops offer a significantly higher energy yield compared to chicken manure. Although chicken manure may still be used in smaller quantities, the emphasis will be on energy crops due to their superior biogas production capabilities. The success of grain silage as a feedstock in the European biogas market highlights the potential of this approach for renewable energy. After evaluating various grass species, Napier Grass and Vetiver Grass have been identified as the most viable options, making them central to CWA's strategy for sustainable and renewable energy production. These energy crops are not only highly efficient but are also most certainly sustainable, ensuring a long-term, eco-friendly solution for the airport's energy needs.
		○ Improper management or leaks in biodigester systems can release foul odors, which can be a nuisance to our nearby residents.	○ The comment re foul odours is noted. Well-managed biodigester systems are designed to operate with minimal odour, turning organic waste into valuable resources like biogas and fertilizer. By ensuring rigorous monitoring, regular maintenance, and the use of odour control measures, we can not only prevent nuisances but also contribute positively to our community by reducing waste and generating sustainable energy.
		○ If biogas is not properly captured and burned, it can release methane into the atmosphere, contributing to air pollution and greenhouse gas emissions (contradicting the statement of net zero by 2050 or decarbonizing).	○ The comment re possible release of methane into the atmosphere is noted. Modern biogas systems are specifically designed to capture and utilize this methane efficiently, turning it into a valuable energy source rather than allowing it to escape into the atmosphere. By implementing stringent controls, advanced technology, and proper maintenance, we can ensure that biogas systems

			contribute to reducing overall greenhouse gas emissions rather than exacerbating them. Far from contradicting net-zero goals, when managed correctly, biogas can play a vital role in the transition to a decarbonized future by providing a renewable and sustainable energy source.
		○ Poorly maintained biodigesters can leak, contaminating local water sources with organic waste or chemicals, posing a risk to drinking water and local ecosystems. Considering the applicant is reliant on groundwater, what are the emergency responses to this? What are the implications for surrounding owners if their groundwater is polluted?	○ The comment re leaks at biodigesters is noted. Modern biodigester systems are engineered with robust containment measures to prevent leaks and protect water quality. Regular inspections, maintenance protocols, and safety measures are key to ensuring that biodigesters operate safely and sustainably. When properly managed, biodigesters not only avoid contamination but also contribute positively by reducing waste and supporting environmental health through the production of clean energy and natural fertilizers. Development of mitigation measures and emergency responses follows on the Impact Assessment phase during the EIA.
		○ The byproduct, if not properly managed, can cause nutrient runoff into water bodies, leading to issues like algal blooms and water pollution.	○ The comment re management of the byproduct is noted. Managed correctly, these byproducts can be safely and beneficially utilised as nutrient-rich fertilizers that enhance soil health without harming the environment. By implementing best practices such as proper storage, application timing, and monitoring of nutrient levels, we can prevent runoff and ensure that the byproducts are an asset rather than a liability. Responsible management of these resources is crucial, and when done correctly, it supports both agricultural productivity and environmental sustainability.
		○ The storage and continued use of digestate results in an increase presence of pests such as flies and	○ The comment re storage of the digestate is noted. Properly managed digestate, which is a byproduct

			rodents. How will this be dealt with, especially in the summer months?	of the bio digestion process, is typically stored in sealed or covered containers to prevent any exposure that might attract pests. Additionally, digestate is often applied directly to fields as fertilizer, reducing the potential for pest attraction. In well-designed systems, the risk of increased pests is minimal. CWA asks for specific evidence or studies that demonstrate a significant increase in pest populations due to digestate use, particularly in systems where proper management practices are followed. How do you know that the presence of pests is directly linked to the digestate and not to other environmental factors? Additionally, what evidence is there that these issues are exacerbated specifically in the summer months?
			○ Biogas is flammable, and improper handling or storage can lead to explosions or fires, posing a safety risk to our nearby future residents. What measures and monitoring will be in place to mitigate this risk?	○ Development of mitigation measures follows in the Impact Assessment phase during the EIA. Biogas systems are designed with extensive safety measures, including pressure relief valves, gas detectors, and automatic shut-off systems, to prevent accidents. These systems are highly regulated and must comply with stringent safety standards to operate, significantly reducing the risk of any safety incidents.
			○ If the biodigester does not operate at the correct temperature, pathogens from the waste might not be fully neutralized, potentially leading to health hazards.	○ Noted. Modern biodigester systems are designed with precise temperature controls and monitoring systems that ensure the process consistently operates within the optimal range. These systems are engineered to automatically adjust and maintain the necessary temperatures to effectively break down organic matter and neutralize pathogens.

		• ROOF MOUNTED WIND TURBINES
		  ○ Bird / owls and Bat Collisions: Roof-mounted wind turbines, like their larger counterparts, can pose a risk to birds and bats. Although the risk is generally lower due to smaller turbine sizes, collisions can still occur, particularly in areas with high bird activity or migratory paths
		
		2.3.4. BULK PORTABLE WATER
		• Refer to page 169 - "According to the civil works report by Zutari, the CoCT has proposed the installation of a 1700mm diameter trunk main in the R312 Lichtenburg Road."
		  ○ Will the applicant be funding for this bulk service out of their development contributions for the installation of the 1700mm trunk main? When and how will this be programmed and implemented?
		
		• Define what the short to medium term is for solely being reliant on Groundwater?
		• Relying solely on groundwater as a water supply for both the construction and operational phases of an airport development can have several negative impacts:
			• ROOF MOUNTED WIND TURBINES
			  ○ The comment re roof mounted turbines is noted. CWA will exclusively utilize vertical wind turbines, with a priority on ground-based installations. These turbines are notably safer for birds and bats compared to traditional horizontal-axis turbines. Vertical turbines generally rotate at slower speeds and lack the large, sweeping blades that pose a higher risk of collisions. Additionally, their compact design and reduced air disturbances significantly decrease the chances of harming wildlife.
			
			2.3.4. BULK POTABLE WATER
			• CWA response: The City of Cape Town's DC policy imposes one-time capital charges on developers to cover the cost of municipal engineering services required due to intensified land use. The policy is guided by principles of fairness, predictability, and administrative ease, ensuring that developers contribute fairly to infrastructure costs. DCs apply to most land use changes that increase intensity and are calculated based on their impact on municipal services, using a predefined methodology. These charges are not considered in isolation but reflect the impact on various aspects such as roads, water, sewer, power, and other essential services.
			• Relying solely on groundwater in the short to medium term, typically defined as a period ranging up to 10 years
			• The risk of over abstraction of groundwater is noted. Development of mitigation measures follows in the Impact Assessment phase during the EIA.

		• Overuse of groundwater, especially during construction when water demand is high, can lead to over-extraction, reducing the water table and potentially depleting the local groundwater reserves for the applicant's neighbours. • The continuous demand during the operational phase could exceed the natural recharge rate of the aquifer, leading to long-term water scarcity in the region. What will the applicant do to recharge the aquifer? • Excessive groundwater extraction can cause land subsidence (sinking of the ground), which can damage infrastructure, alter drainage patterns, and increase flood risk. • Intensive use of groundwater by the airport could lead to a reduction in water availability for nearby communities, affecting drinking water supplies, agriculture, and local industries. • Competing demands for groundwater between the airport and local residents or farmers can lead to conflicts, particularly in areas where water resources are already scarce. 2.3.5. SEWER MANAGEMENT AND TREATMENT • On page 175 it's noted that Fisantekraal WWTW can take additional capacity, but we would like to refer the applicant to the vast amount of sewer overflow drains reported in the Fisantekraal area (Heat Map below). This development will add to the already strained sewage network, especially the Fisantekraal WWTW that experience operational issues during loadshedding, theft and vandalism	• The WULA is based on available sustainable yield of the boreholes, based on natural recharge. No recharge by the applicant will be considered. • The WULA is based on available sustainable yield of the boreholes, based on natural recharge. No recharge by the applicant will be considered. • This comment is noted. The WULA is based on available sustainable yield of the boreholes and surrounding users. • This comment is noted. The WULA is based on available sustainable yield of the boreholes and surrounding users. • Noted. The WULA is based on available sustainable yield of the boreholes and surrounding users. 2.3.5. SEWER MANAGEMENT AND TREATMENT The comment is noted. Use of the Fisantekraal WWTW is an alternative being considered during the Scoping phase.

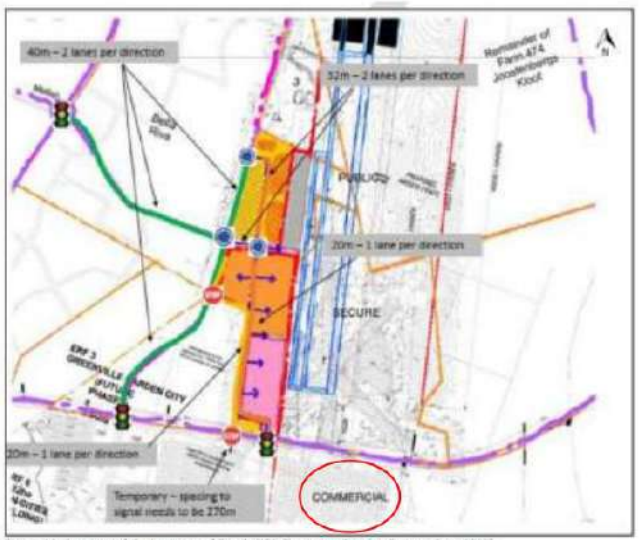
		 • Construction of a sewage treatment plant o If the facility malfunctions or if there is an accidental discharge, untreated or partially treated sewage can contaminate local water bodies, leading to the spread of pathogens, harmful chemicals, and nutrients that can cause algal blooms and eutrophication. This degrades water quality and harms surrounding aquatic ecosystems. o Sewage treatment plants can emit gases such as methane, ammonia, and hydrogen sulfide, which can contribute to air pollution. These gases can also produce unpleasant odors that affect the quality of life for Greenville Garden City residents. o There is a risk of exposure to pathogens and harmful chemicals if the facility is not properly managed. Odors and emissions from the plant may also lead to respiratory issues or other health concerns for people living in Greenville Garden City.	The comments re potential accidental discharge, emission of gases, risk of exposure to pathogens, management of sludge and energy requirements are noted. Development of mitigation measures follows in the Impact Assessment phase during the EIA.

		○ If sludge or other by-products from the treatment process are not properly managed, they can contaminate the soil with heavy metals, chemicals, or pathogens. This can affect local agriculture and vegetation. ○ Sewage treatment facilities often require significant amounts of energy to operate, particularly in advanced treatment processes. This energy consumption contributes to greenhouse gas emissions, which can exacerbate climate change, contradicting the applicant's motivation for decarbonization. 2.3.6. SOLID WASTE MANAGEMENT • Leachate from improperly managed waste sites can infiltrate groundwater or run off into nearby rivers and streams (such as the Mosselbank River) , leading to water pollution. Contaminated water bodies can harm aquatic ecosystems, kill fish and other wildlife, and make water unsafe for human consumption or recreational use. • Improperly managed waste sites can attract animals, such as birds, rodents, and insects, which can disrupt local ecosystems. These sites can become breeding grounds for disease-carrying pests, which may spread illnesses to humans and other animals. • Decomposing waste emits foul odors, which can significantly reduce the quality of life for residents living near the proposed airport. Persistent bad smells can lead to headaches, nausea, and stress. • Irrigation of liquid digestate as well as the solid fraction (possibly stored on site) is of concern as the area would attract flies, rodents and increased odor concerns. • Refer to page 180 regarding waste license. Please explain why a waste license would not be needed, especially	2.3.6. SOLID WASTE MANAGEMENT The comments re leachate, improperly managed waste sites, foul odours are noted. Modern waste management practices, including the use of engineered liners, leachate collection systems, and regular monitoring, can effectively prevent leachate from infiltrating groundwater or running off into rivers and streams. By implementing these safeguards, we can protect aquatic ecosystems, preserve wildlife, and ensure that water remains safe for human consumption and recreational use. Proactive measures and stringent regulations are key to mitigating these risks and maintaining the integrity of our water resources. Waste licence: During pre-application consultation with DEA&DP: Directorate Waste Licencing the following feedback was received: "No Waste Licence application is required for the proposed project, but CWA will have to register in terms of "National Norms and Standards for the Storage of Waste" (GN926 of 29 November 2013) should the facility have the capacity to store more than 80m³ for

		considering the types and volumes of waste expected to be produced from the operational phase. o Byproducts from Digester o Byproducts from Sewage Treatment Plant o Passenger, offices, restroom and commercial solid waste o Food waste & Recyclables o Hazardous waste such as Chemical, batteries and medical waste o Aircraft related waste such as cabin waste, sewage, used oil and lubricants and jet fuel spills	hazardous waste and/or 100m³ for general waste at any one time and for a period exceeding 90 days. Registration in terms of "National Norms and Standards for Sorting, Shredding, Grinding, Crushing, Screening, Chipping or Baling of General Waste" (GN1093 of 11 October 2017) if general waste is sorted, shredded, grinded, crushed, screened, chipped, or baled in an operational area at the facility exceeding 1000m2. If the operational area in which waste is sorted, shredded, grinded, crushed, screened, chipped or baled does not exceed 1000m2, the facility needs to register in terms of GN1093 only and adhere to section 28 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and sections 16(1) and 16(3) of the NEM: WA. The biodigester resorts under the NEM: WA "National Norms and Standards for Organic Waste Treatment" (GN1984 of 1 April 2022) and no longer requires an application for a waste management licence. Facilities that have the capacity to process more than 10 tonnes of organic waste per day need to register in terms of and adhere to GN1984." The following Norms and Standards are applicable to the project: ▪ National Norms and Standards for the Storage of Waste (GN 37088, 29 November 2013). ▪ National Norms and Standards for the Sorting, Shredding, Grinding, Crushing, Screening or Bailing of General Waste (GN 41175, 11 October 2017). ▪ National Norms and Standards for the Treatment of Organic Waste (GN 1984, 1 April 2022).

		2.3.7. STORMWATER MANAGEMENT STRATEGY • The stormwater of different surface runoff areas should be treated differently, for example the workshop areas where oil is used should have the appropriate oil traps and filtering systems to prevent the runoff entering the overall stormwater system. 2.3.8. EXTERNAL AND INTERNAL ROAD DESIGN • "Future land use projections and approved future planned developments in the immediate surrounds of CWA results in a future road network." o Does the applicant depend entirely on other developers to provide the critical infrastructure needed to service the airport, or will the applicant use their development contributions to support infrastructure provision? o The planned timing/ roll-out of such bulk road network/s and infrastructure is highly unlikely to align.	2.3.7. STORMWATER MANAGEMENT STRATEGY A stormwater management plan forms part of the Impact Assessment Phase and will become available to all registered I&APs for comment during the Impact Assessment phase of the proposed project. 2.3.8. EXTERNAL AND INTERNAL ROAD DESIGN A Traffic Impact Assessment forms part of the Impact Assessment Phase and will become available to all registered I&APs for comment during the Impact Assessment phase of the proposed project. CWA response: • CWA collaborates with other developers to ensure the efficient provision of critical infrastructure; it is incorrect to imply that CWA is entirely dependent on external entities for this purpose. CWA has a strategic approach where it leverages both its own resources and development contributions to support and enhance the infrastructure necessary to service the airport. Our commitment to infrastructure development is not passive. We actively participate in planning, funding, and executing projects that directly contribute to the airport's functionality and overall connectivity. This includes contributions to road networks, utility services, and other essential infrastructure that ensures seamless operations. Moreover, these efforts are coordinated with broader regional development plans, ensuring that CWA is not only self-sufficient but also a catalyst for growth in the surrounding areas.

		• We note that planned infrastructures linked to the Bella Riva Development is being referenced although at this stage only holds the Environmental Authorization and no LUPO approval presently. • "Golden Arrow Bus Services (GABS) and MBT services should be sufficient in terms of public transport demand until the IPTN plan is in place, and the Fisantekraal rail line may also provide commuter services in future." (p. 184) o Using words such as "should be sufficient" and "may also provide" unfortunately does not align with the reality that both of these services rendered once in the morning and once in the evening. • Due to the complex nature of the taxi associations in the area, how will the applicant mitigate the risks of conflict that could potentially arise between taxi association, bolt/uber drivers and public transport? From experience, taxi violence impacts the community and micro-scale economy when roads are blocked off with strikes and residents cannot leave for work, and surely blocked roads will severely impact access to the airfield. Incorporating a public transport system will take intensive engagements with the taxi associations to minimize the potential violent situations.	• CWA is not reliant on this road infrastructure through Bella Riva • CWA is committed to ensuring the well-being and convenience of its workforce by offering free transportation services to employees residing within specific distances from the airport. This initiative is designed to alleviate commuting challenges and reduce transportation costs for workers, thereby fostering a more inclusive and accessible working environment. By providing complimentary transport, CWA aims to enhance employee satisfaction and productivity, while also contributing to environmental sustainability by reducing the number of individual vehicle trips. This service will be available to workers living within a designated radius, ensuring that those in close proximity to the airport can easily and efficiently travel to and from work. • The comment re taxi associations and public transport is noted. Mitigating the risks of conflict between taxi associations, e-hailing drivers, and public transport at CWA involves a strategic approach that includes early and continuous engagement with all stakeholders to understand their concerns and interests, fostering inclusive transport planning that fairly allocates resources and spaces, and implementing clear regulations with strict enforcement to maintain order. Capacity-building initiatives can help taxi associations adapt to changes, while robust security measures, such as CCTV surveillance and rapid response teams, ensure safety and monitor potential conflicts. Additionally, public awareness campaigns will educate users about transport options and the importance of respecting all service providers, while mediation processes can be

			established to resolve disputes before they escalate. Finally, leveraging data-driven decision-making will enable effective monitoring and timely policy adjustments to ensure smooth operations at CWA.
		• The map utilized in figure 49 (p.190) indicating 'commercial' as the land use opposite the intended main runway is not correct. The majority of the land use is residential zoning and is not a true reflection of our planning and approved concept plan.  Figure 49: Conceptual design Internal Roads (ITS, Transport Scoping Report, Sept 2023)	• The comment re the map on page 190 is noted and will be considered. Refer to 1.2 and 1.3 above
		2.3.9. BULK AVIATION FUEL FARM AND FUEL FACILITIES Bulk fuel storage has numerous risks associated to neighbours: • Leaks or spills from storage tanks can lead to fuel seeping into the soil, contaminating groundwater resources. This	2.3.9. BULK AVIATION FUEL FARM AND FUEL FACILITIES Risks and impacts associated with the bulk fuel farm and additional fuel facilities will be assessed in the Impact

		can make water unsafe for consumption and harm local ecosystems. • Volatile Organic Compounds and other harmful emissions can escape from fuel storage tanks, contributing to air pollution and increasing the risk of respiratory problems for nearby populations. • Runoff from spills or leaks can enter rivers, lakes, or oceans, leading to water pollution that can harm aquatic life and disrupt ecosystems. • Contamination from fuel spills can destroy habitats, leading to a loss of biodiversity in the affected area, particularly if spills reach sensitive ecosystems like wetlands. • The storage and handling of large quantities of fuel contribute to the release of greenhouse gases, both through direct emissions and through the energy-intensive processes involved in fuel production and distribution. • Fuel is highly flammable, and improper storage can lead to fires or explosions. This poses a significant risk to nearby communities, workers, and infrastructure. 2.4. OVERVIEW OF THE RECEIVING ENVIRONMENT 2.4.1. ARCHAEOLOGICAL BASELINE ASSESSMENT • On page 203 the applicant lists protocols that were found to be applicable to the proposed development of which number 10 specifically references requirements for noise impacts. We have been requesting noise cones since the advisement of this project. We view this as a fatal oversight not having sight of the complete unabridged noise cone report and support plan. 2.4.2. BASELINE NOISE STUDY	Assessment Phase. All registered I&APs will have the opportunity to comment. A MHI forms part of the Impact Assessment Phase. All registered I&APs will have the opportunity to comment. 2.4. OVERVIEW OF THE RECEIVING ENVIRONMENT 2.4.1. ARCHAELOGICAL BASELINE ASSESSMENT The comment received does not relate to the archaeological baseline assessment. Further clarity is requested form I&AP. A Noise Impact Assessment becomes available in the Impact Assessment Phase for registered I&APs to comment. 2.4.2. BASELINE NOISE STUDY

		• Baseline noise is irrelevant and what is required is the noise cones and formal study/report. The baseline study only being representative of farmland and existing characteristics. • Regarding the location of the baseline measure sites for sound – we would like to ascertain as to why baseline points were not set up along Lords Walk in Greenville (where there are frequent light aircrafts flying) and flightpath of existing light aircraft to understand how this will compare to the future noise cones contours. • Will the noise cones study consider the increased heavy vehicle traffic counts as well? 2.4.3. FAUNAL AND AVIFAUNAL • Refer to page 242 listing the protected areas. The identified sensitive areas in Greenville Garden Cities should also be listed as it is deemed core conservations areas. The functioning of one of our core conservation areas over the last 7 years how wildlife has returned in the area such a big diversity of birds, including flamingos, buck, snakes and amphibians. • How will increased air traffic impact the functioning of these conservation areas. • Reference to page 241 where the reports state how degraded the Renosterveld and Freshwater habitats are. These areas shouldn't be disregarded just because they are presently degraded. • Greenville Garden City's identified core conservation areas was also highly degraded but was put aside for conservation, and by excluding cattle, humans and vehicles, these areas has showed great improvement of quality of the habitat and ecosystem. Similarly, the	• The comment is noted. A Noise Impact Assessment becomes available in the Impact Assessment Phase for registered I&APs to comment. Response from specialist: • There were two points in the Greenville area. One at the Fisantekraal High School (MP03) and one within the Fisantekraal community (close to Lords Walk) (MP04). These are considered representative of the Greenville area (in our report named Fisantekraal community). • Yes, the vehicular traffic increase will be taken into consideration for the noise impact assessment of the airport operation 2.4.3. FAUNAL AND AVIFAUNAL The core conservation areas within Greenville Garden Cities will be considered for inclusion in the protected areas. Response from FEN: Whilst it is acknowledged that rehabilitation efforts of the wetlands adjacent to the Greenville Garden Cities has resulted in the increased utilisation/presence of faunal species, it is unlikely that small antelope will permanently reside herein due to increased anthropogenic activities as well as ongoing threats of persecution from local communities and domestic and feral dogs. Recent studies in the area as part of future road upgrades further indicated that whilst habitat may be suitable to support such species, their presence was not noted. In terms of the air traffic, it is important to note that the current airport is functioning and as such, presents an existing baseline for noise impacts, which species appear to be tolerant of and have become accustomed to. However, the proposed airport upgrade will pose a notable upshift in terms of noise pollution in the area due to the nature of larger aircraft making use of the airport. Whilst it is possible that species currently present will

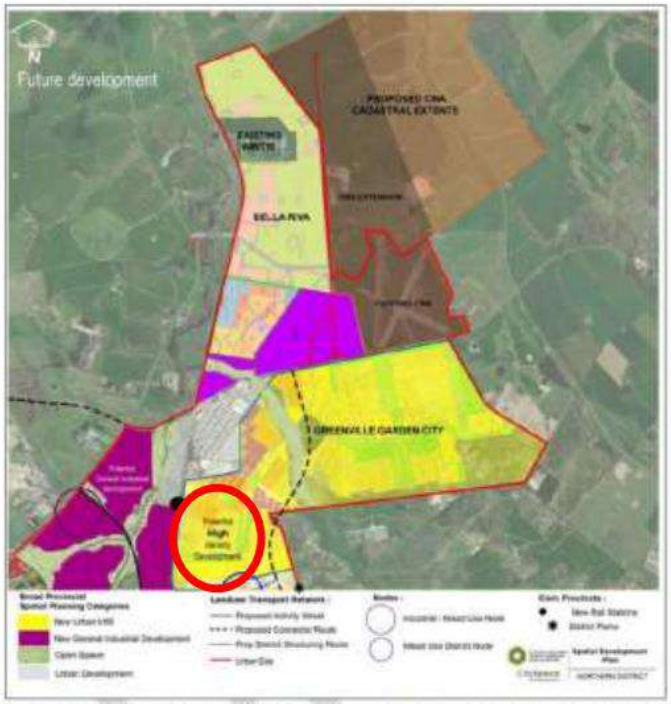
		effectiveness of rehabilitation of the Mosselbank also indicated the resilient of these sensitive areas and do not agree with the solution of off sets.	initially be negatively impacted upon, with time such species are likely to become habituated to the sound of aircrafts (as they currently are to light aircraft). Such can be readily seen by the presence of several species including Greater Flamingos at wetlands nearby OR Tambo and Cape Town International Airport. Furthermore, the proposed runway orientation will ensure that planes are not landing or taking off over the Garden Cities wetlands, with the parallel flight paths being approximately 2.1km away from the wetland system. Whilst planes are likely to still be heard at this distance, the volume of such is not expected to result in species abandoning the Garden Cities rehabilitation/conservation sites. Whilst it is further noted that rehabilitation efforts would potentially see the improvement of the Renosterveld and Freshwater habitats at Cape Winelands Airport, it must be noted that the remaining portions of habitat are largely fragmented with limited ecological connectivity and functioning from a faunal perspective. Rehabilitation of these remaining areas would likely result in pockets of suitable areas for fauna, however they will be at a significantly higher risk to ecological impacts/ disaster events, as species will not be able to readily flee to suitable surrounding habitats. Rehabilitation / conservation efforts would be far better invested in larger, intact tracts of suitable habitat where contiguous portions of land can be rehabilitated / conserved, providing increased species occupation opportunities whilst better managing and proving for ecological connectivity and ecosystem functioning.
		2.4.4. HERITAGE (CULTURAL, ARCHAEOLOGICAL AND VISUAL) • Based on the feedback from the specialist Dr Stephen Townsend, the airfield has four old structures and poorly maintained landing strips of no value or no motivation for the existing airfield to be utilized as a final airport. Has any other site been considered which will have a lesser impact	2.4.4. HERITAGE (CULTURAL, ARCHAEOLOGICAL AND VISUAL) The CWA is an existing site with existing rights. Please refer Section 8.1 in the Scoping report: No alternative site has been considered on the basis that:

			on surrounding neighbours, resident and developments. And if not, why not, as no real benefit are achieved as a result of utilizing the existing facilities specifically.	• CWA is an existing operational and licensed airport that has been in existence for 80 years, operating at the current site. • The expansion of CWA is being developed on a purely commercial basis and without government funding, on the principles of financial sustainability and viability, therefor it aligns with the Policy Statement 15 in the White Paper on Civil Aviation Policy (2017). • As an upgrade of an existing airport rather than choosing a new site it aligns with the preference expressed in the NADP (2015) for "the upgrading of existing airports over development of green-field airports." • The land belonging to CWA is already zoned as an airport. • The CWA properties is centrally located with various existing access points from regional roads. • The CWA properties have access to groundwater that can sustain 75% percentage of the water demand. • The site can tie into existing and future planned municipal service infrastructure. • Most of the application area earmarked for expansion is already owned by Cape Winelands Airport Ltd or Capewinelands Aero (Pty) Ltd or in companies controlled by it. • The potential cost of establishing an airport to the proposed project scale at an alternative greenfield site would prove to be excessive given that the current site and properties are already available, the site is operational as an airport and could be optimised due to available land to accommodate the proposed project.

			• Given the location, CWA is well positioned to provide a convenient and safe airport option for residents in the Cape Metropole and beyond. Road access to the site is through various safe routes and the site does not pose the restrictions and risk to expansion through squatting and land invasion. • Considering topography, required airspace integration and exclusion zones (such as the Koeberg nuclear zone) an appropriate alternate site is not available in the region. No alternative site could be identified that complies with all of the following locational criteria: • a slope of less than 1 % over 4.3km and in the direction of the prevailing winds, • a site that is not located in a proclaimed nature reserve, • a site that is not in a physically built-up area, or so close that landings and take offs will be problematic. • a site that falls outside of the FACT controlled airspace, • and a site that is outside the Koeberg Nuclear Power Station (KNPS) exclusion zones. An airport should ideally be on the urban edge and not some distance outside or way inside the UDE. It needs to be close to urban infrastructure, but not in built-up areas. It needs to be accessible to freight and passengers with a well-established multi-directional road network and close to rail. Lastly, the preferred site location is leveraging off an existing airport which is a long-established land-use in this location. Therefor there is no feasible and reasonable site / location alternative as this proposed project is for the expansion of an existing airport with existing aviation rights at this site.

		2.4.5. EXISTING VISUAL LANDSCAPE • Reference on page 255 “According to the Northern District Plan, the study area forms part of the urban periphery of CoCT where extensive low-density development is expanding the residential “hinterland”. o This statement is incorrect considering the already approved multipurpose residential development approved by Province and CoCT, and the concept plan incorporating various high density and suitable land uses. The provision of housing intended is done so with a Tripartheid agreement between Province, CoCT and Garden Cities to provide essential housing to communities in dire need of same. The comment “and the Greenville Garden City development across the R312 will erode the rural agricultural landscape character within these parts of the receiving environment” shows no compassion nor acknowledges the need for housing for dire communities. We view this statement in a very poor light. • In general land use intensifies and densifies southward and southwestward, with pockets of development within the agricultural landscape (such as the Durbanville industrial	2.4.5. EXISTING VISUAL LANDSCAPE A Visual Impact Assessment will form part of the EIA Phase. - CWA response: • The proposed expansion site for Cape Winelands Airport (CWA) needs to be evaluated in the context of the multiple developments already approved and planned for the area, including the Bella Riva development, the Fisantekraal industrial node, high-density residential projects within the urban edge, and the Greenville Garden City development across the R312. Collectively, these developments will significantly alter the rural agricultural landscape character that currently defines the region. This collective transformation will impact the visual quality and coherence of the scenic routes and surrounding cultural landscapes, leading to an inevitable shift from an agricultural to a more urbanized and industrialized environment. It is important to note that CWA had no part in drafting the Northern District Plan and is simply quoting verbatim from it. The Northern District Plan refers to the hinterland 11 times, including settlements such as Philadelphia, Klipheuwel, Joostenbergskloof Conservation Area, and Mikpunt, which should be protected from expansion. The plan emphasizes that urban sprawl should be prevented to safeguard the vast agricultural hinterland and, in doing so, build a denser urban footprint to enhance the potential for Transit-Oriented Development (TOD). It makes no sense for GC to try and quote snippets of a document which cannot be read in context and therefore try and alter sentiment, and then go on to say they “view this statement in a very poor light”. • This comment is once again taken out of context. Page 257 refers to the cumulative development and the merging of

		park and Fisantekraal and Greenville Garden City residential area). Garden Cities NPC (RF) 12 o Add Greenville Garden City • Refer to page 257 – "Their delineation on a map should therefore follow along the new urban edge to portray the reality on the ground more accurately" o Who is the "their" in the above statement? As Greenville development is within the Urban Edge and we are not aware of the new urban edge as referenced by the reports and Garden Cities are also not aware of any PPP pertaining to the amendment of the Urban Edge in the MSDF or Northern District Plan (presently in hand) or formal application for same. • Figure 90 refers to Greenville as potential high-density development – remove potential as the construction of that Greenville BNG houses is being rolled-out.	suburban areas (conurbation), which will lead to significant changes in these landscapes. • *Their* refers to the extents and boundaries of the cultural landscapes (page 257 Scoping report). "Their" refers to the multiple individual developments in the area which will result in cumulative development and the merging of suburban areas (conurbation), which will lead to significant changes in these landscapes. • Greenville's potential for high-density residential development is promising, especially with the initiation of construction on some of their new housing projects. However, the reality of realizing this potential can be quite different, as circumstances often change. Factors such as zoning regulations, which may restrict density, and infrastructure limitations that could struggle to support a larger population, pose significant challenges. Environmental concerns and community opposition might also emerge, altering the trajectory of the development. Moreover, economic fluctuations, legal disputes, or shifts in political and regulatory landscapes can all transform what once seemed like a feasible plan into a complex and uncertain reality. Additionally, even approvals that were once secured can lapse if not acted upon promptly, further complicating the path from potential to reality. Thus, while the potential for high-density development exists, the reality may unfold differently as circumstances evolve.

		 Figure 90: Map showing proposed future development in the study area (Filia Visual, Visual Scoping Report, Sept 2023) 2.4.6. OBSTACLE EVALUATION SURVEY (OLS) • Appendix reference incorrect on page 284. It should be 18. - An evaluation of the natural and man-made constructions inside and outside the CWA boundary (Refer Appendix 1418 Obstacle Evaluation Survey / OLS). • Reference to this statement: "The purpose of the OLS is to define the volume of airspace that should be ideally kept free or safeguarded from obstacles, and to take the necessary measures to ensure the safety of aircraft, and thereby the passengers and crews aboard them, while taking-off or landing, or while flying in the vicinity of an airport."	2.4.6. OBSTACLE EVALUATION SURVEY (OLS) • Correction on page 284 is noted and will be effected. • The assessment of impacts form part of the Impact Assessment Phase of the proposed project and will be provided to registered I&APs for comment during the PPP.

		○ Kindly furnish the detailed OLS plan clearly depicting impacts on adjacent residential developments, specifically to Greenville Garden City to the South; highlighting the further potential height limitations. 2.4.7. ALTERNATIVES • Regarding the alternatives, we fail to understand the purpose of an EIA process if part of the process is to review and consider alternatives and this process is reviewing no alternatives. Garden Cities NPC (RF) 13 • We note that the land belonging to the applicant is already zoned as an airport, however, further land that has been acquired for the full scope of the future expansion of the proposed airport is outside the Urban Edge on active agricultural land and requires further legislation and relevant processes to be undertaken, such as Act 70 of 70, urban edge amendment and further approvals. We therefore do not agree that the full land opportunity relating to the CWA project is zoned accordingly (to our knowledge). • "Given the location, CWA is well positioned to provide a convenient and safe airport option for residents in the Cape Metropole and beyond. Road access to the site is through various safe routes and the site does not pose the restrictions and risk to expansion through squatting and land invasion." ○ This is factually incorrect as it takes no consideration of existing approval and planning already in hand.	2.4.7. ALTERNATIVES • Please refer Section 8 of the Scoping report for detail and extent of Alternatives considered. • According to H&A Planning the proposed development area requires an elongated shape for the runway safety area, and the landside development is located to the West of the proposed runway. These areas need to be rezoned to "Transport Zone 1 with consent to permit an airport". The areas East of the proposed airside currently zoned as agriculture will remain as agriculture zoning with associated farming activities (page 69 of Scoping report). • This is not factually incorrect and is a subjective assertion by CWA. CWA still asserts that it is strategically positioned to serve as a convenient and safe alternative for residents in the Cape Metropole and surrounding regions. With multiple well-maintained routes providing efficient road access, the airport is easily reachable from various parts of the region, making it a preferred choice over more distant options. The site benefits from a low risk of urban encroachment, such as squatting or land invasions, ensuring that future expansions can proceed without the complications often associated with informal settlements. This stability in land use planning not only enhances the safety and security of the airport but also allows for confident long-term investments. CWA's location and

		2.4.8. AIR QUALITY IMPACTS • Refer to page 351 - "The air quality impacts of both scenarios on the Klipheuwel and the Fisantekraal communities are anticipated to be of Low significance. The Durbanville and Kraaifontein suburbs are likely to lie outside the Very Low impact zones." o Based on the statement on the potential air quality impacts as listed above we fail to understand how additional air traffic of a higher volume and lager type aircraft does not negatively impact on the surrounding community and should the airport proceed, the residential zoning to the east of the housing already constructed will further be landlocked in industrial and/or commercial opportunities, further exacerbating the impact on air quality. o The impacts must be assessed on a broad scale, including cumulative effects, rather than focusing solely on specific activities related to the airport. A comprehensive study of the entire life-cycle impacts is necessary. 2.4.9. BOTANICAL IMPACTS • We stand by our original comments that we do not agree with Biodiversity offsetting approach as Garden Cities had to earmark hectares of valuable housing property to be retained for conservation. As developers we had to alter our plans and incorporate wetlands and areas of ecological importance, and the applicant should be evaluated against the same standards.	infrastructure make it an attractive and secure option for air travel and investment, with the potential for seamless expansion as demand increases. 2.4.8. AIR QUALITY IMPACTS The potential air quality impacts as referenced in 9.2 of the scoping report should be read in conjunction with the detailed air quality baseline report and further impacts will be dealt in the next phase of the EIA. Response from specialist: • It is agreed that there will be a negative impact due to the airport operations. These impacts will be studied in detail in the Air Quality Impact Assessment report, which will depict the air pollution concentration contours and zones of influence based on the airport phases. The expected low significance impacts in the above-mentioned communities is based on their location in relation to the distance from the runway, the runway alignment and the emission due to the operations at the airport. The future operators within the industrial and commercial zones will need to adhere to the National Air Quality Standards and ensure that these are not exceeded due to their operations within these zones. 2.4.9. BOTANICAL IMPACTS CWA Response: Offsets based on botanical impacts are conservation measures implemented to compensate for the loss of biodiversity and ecosystem services resulting from development projects. For CWA, much like Garden Cities, these offsets will be a mandatory requirement to address the botanical impacts of each respective development. CWA will

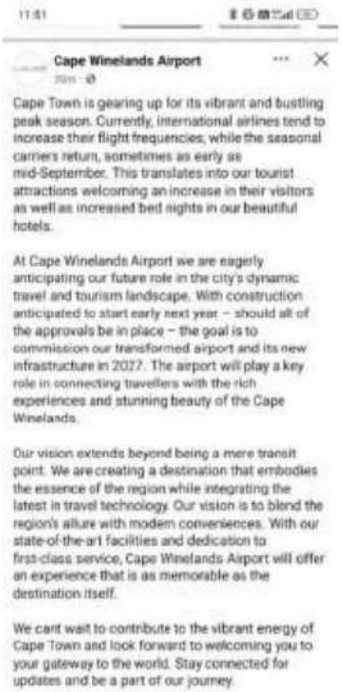
		• Specialist study refer to 75ha for offset, however the scoping report indicated 63 ha (p.356). The again on page 358 it refers to 75 ha. Please confirm the correct area for offset. Screenshots to follow. • Given the Endangered and Critically Endangered status of the underlying habitats it is strongly recommended that any mapped areas of remnant habitat that are lost to development should be offset by formalised conservation of high conservation priority examples of the same habitat in the region, at minimum ratios of 20:1 (for non-pristine habitat) and 30:1 (for better quality examples: as per Dept. of Forestry, Fisheries & Environment offset guidelines, 2022). Preliminary estimates suggest that the 1.6ha of Very High sensitivity vegetation (partly degraded) will need to be offset at a ratio of at least 20:1, and the 2.3ha of Medium sensitivity at a ratio of about 10:1, and the 1.3ha of High sensitivity vegetation at about 15:1. This means that a total offset of about 75ha (plus ongoing environmental management budget for this) might be required to help mitigate the unavoidable residual botanical impacts of the loss of natural habitat on site. Consultation with a biodiversity offset specialist and relevant conservation authorities will be required to draw up and finalise this offset, which is typically required prior to issuing of any Environmental Authorisation. • *Any mapped areas of remnant habitat that are lost to development should be offset by formalised conservation of high conservation priority examples of the same habitat in the region, at minimum ratios of 20:1 (for non-pristine habitat) and 30:1. A total offset of at least 63ha (plus ongoing environmental management budget for this) will be required to help mitigate the unavoidable residual botanical impacts of the loss of natural habitat on site.*	ensure no net loss of biodiversity by creating or preserving areas that it can support similar or better ecological functions as those impacted by its development. These offsets will be guided by principles of ecological equivalence, proximity, and additionality, ensuring that the compensation genuinely contributes to biodiversity conservation and supports the long-term viability of ecosystems. Offsets are not an exact science but rather an indication of what needs to be done. The study identifies a minimum requirement of "no less than" 63 hectares, which, in simpler terms, can be seen as the baseline. A more balanced or average target is around 75 hectares, which is considered the middle ground for offsets. Although the maximum hasn't been specifically defined, based on the relationship between the minimum and the middle ground, the maximum could be estimated at approximately 87 hectares. Response from specialist: • Biodiversity offsetting has not been, and never should be, the first step in terms of biodiversity impacts. The Mitigation Hierarchy should ideally be followed – 1) avoidance of impact 2) minimising impact 2) mitigating impact, and this was followed as far as possible, but 1) avoidance was constrained by the fact that this is an airport, and not just housing, so it is both large and very linear. Some sensitive areas – relatively small areas fortunately – could not be avoided given required runway angles and distances. It is the unavoidable loss of these relatively small, partly degraded areas that need to be offset, as there is still at least a Medium negative botanical impact even after avoidance, and after mitigation such as Search and Rescue. The largest Very High sensitivity area has been avoided, and will form part of the conservation management area on site • The figures of 63ha and 75ha referred to in the Scoping Report were initial rough calculations, and as the overall footprint has changed with various layout iterations so has the required offset

		2.4.10. FRESHWATER ECOLOGY IMPACTS • Throughout the various reports, references are made regarding the degraded state of the wetlands and other habitats. Greenville Garden City's depression wetland (a core conservation area) was also highly degraded but was put aside for conservation. By excluding cattle, humans and vehicle movement, this area has showed great improvement of quality of endangered species. Similarly, the effectiveness of rehabilitation of the Easten Tributary of the Mosselbank River also indicated the resilient of this sensitive areas and we therefore don't agree with the solution of offsets and alternative layout should be considered. o Wetland offset projects may not fully replicate the biodiversity of the original wetlands, leading to a net loss of species and habitat complexity. o The ecological functions of a newly created or restored wetland may not match those of the original, leading to a deficit in ecosystem services. o Newly created wetlands take time to develop the full range of functions and biodiversity of natural wetlands, leading to a temporal loss of ecosystem services. o Differences in soil, hydrology, and climate between the offset site and the original wetland may hinder successful replication of ecological conditions. o Accurately measuring the success of wetland offsets and monitoring them over time can be technically challenging – what organization will	extent, which is also impacted by various habitat quality modifiers used in the calculation. The final vegetation offset requirement has now been determined to be 77ha. 2.4.10. FRESHWATER ECOLOGY IMPACTS CWA appreciates the perspective of Garden Cities (GC) on exploring alternative layouts, but we believe that offsets are a crucial component in our broader strategy to balance development with environmental stewardship. While alternative layouts can mitigate some impacts, they may not fully address the biodiversity loss that is inevitable with large-scale developments like ours. Offsets are not only a legal and common mechanism but also a proven and effective tool to achieve the necessary environmental outcomes. In fact, CWA will be providing wetland offsets on our own site by preserving and maintaining a series of wetlands. This initiative ensures that we directly contribute to the conservation of critical habitats within our project area. By integrating offsets into our approach, we demonstrate a commitment to sustainability that extends beyond the immediate boundaries of our project, aligning with global best practices in environmental management. Response from specialist: The comment regarding the degraded nature and conservation status of the depression wetland associated with the Greenville Garden City is noted. As part of the freshwater assessment, an offset investigation is currently being undertaken to rehabilitate the remainder of the seep wetland as well as the downgradient channelled valley bottom wetland with the aim of maintaining and where possible improving ecological functionality of these systems. The selected wetlands are within the same local catchment (of which a portion of the wetland that will be lost will be reinstated). As indicated in the freshwater report, the seep wetland associated with the CWA is highly degraded and

		manage the offset habitat, who will monitor its success? o Weak enforcement of environmental regulations can lead to poorly implemented offset projects	have very limited ecological sensitivity. During the offset initiative preparation, it was determined that 6.74 hectares (ha) (but with a total loss of 7.44 ha which accounts for indirect impacts) of wetland habitat would be lost due to the proposed CWA development. To achieve the no net loss objective, the 7.44 ha loss translates into a residual impact of 3.97 functional hectare equivalents (HaE) and 13 habitat HaE of wetland to meet the no net loss objective. To achieve this, the remainder of the seep wetland and a portion of the downgradient CVB wetland (equating to a 40ha area) has been identified to be rehabilitated. Rehabilitating these systems will improve their ecological condition by 1) keeping livestock out of the systems, 2) revegetating the wetlands with suitable wetland vegetation and 3) reinstating hydrological functionality of the systems. Ecosystem services is also anticipated to improve. As part of the offset investigation, roles and responsibilities will be described, which will include who will manage the offset habitat and its success. As the property in which the offset area is situated is owned/managed by CWA, CWA is committed to ensure that the wetland offset is successful and that the necessary authorities are involved, as required.
		2.4.11. HERITAGE IMPACTS Refer to page 376 - "Where tenants or future potential developers within precincts require the use of bright colours in line with their branding (which are often on the warm colour spectrum) on exterior portions of their buildings, these areas must not cover more than 25% of the building façade. Roof colour should however always conform to the overall material palette of the rest of the development, to ensure that views from higher elevation experience a measure of uniformity in the roofscape, within a range of appropriate colours."	2.4.11. HERITAGE IMPACTS CWA response: The precincts referred to are within the CWA proposed development site and does not relate to the Greenville Garden Cities site. CWA, as an "external party," will definitely not adopt or copy the design guidelines of the Garden Cities Greenville Project, especially concerning the BNG housing, which features the vibrant District 6 colour scheme. Our design guidelines prioritize muted themes and colours.

		Greenville Garden City and more specifically the BNG housing has been themed with the District 6 bright colours, specifically to bring a more aesthetical appeal to it Garden Cities NPC (RF) 15 and we find it concerning that an external party is allowed to prescribe to an existing and approved Greenville Urban Design Guideline which was previously approved by the CoCT with supporting Architectural Guidelines. 2.4.10. TRANSPORT IMPACT • Refer to page 8 for comments regarding transport. 2.4.11. NOISE IMPACT • Refer to page 352 "The closest residential noise-sensitive receptors to the Cape Winelands Airport operations are the two residential communities of Fisantekraal, towards the west, and Klipheuwel, towards the north." o Greenville Garden City should be added as a residential area as well as the anticipated further development to the south of the CWA. • Refer to page 353 - The "Preferred alternative" will have a higher number of aircraft operations but will also have a runway orientation, which will direct the noise impacts zones parallel to the Bella Riva Lifestyle & Country Estate and along the eastern side of the Greenville Garden City. The eastern sides of these developments may experience Medium to High significance impacts. o Garden Cities is stressing this particular impact as it impacts two thirds of the Greenville development and refer to our standing comments related to noise concerns (with the absence of the requested noise cone study a suitable template had to be used; being that of CTIA) :	2.4.10. TRANSPORT IMPACT Noted. 2.4.11. NOISE IMPACT • Noted. • The comment is noted and has been responded to in previous points.

		- Construction activities and ongoing air traffic will contribute to elevated noise levels, disrupting the peace and tranquility of surrounding Greenville community. - Increased noise can have adverse effects on the well-being of residents, leading to sleep disturbances and other health issues. - Increased noise levels will have a negative impact on property values and house sales as residents would not want to invest in areas with high noise and traffic areas, impacting Garden Cities financially, but also our main objective of providing housing to low-income families. • Refer to page 401 "Impact Assessment will be based on development of noise contours for projected Scenario 1 and 2. Note this will only be included in the Impact Assessment Phase of the project as it is impact related and will be a fatal flaw if included in the Scoping Phase." o In terms of the noise impact assessment, the applicant makes the statement "Note this will only be included in the Impact Assessment Phase of the project as it is impact related and will be a fatal flaw if included in the Scoping Phase", however the applicant's comment is misguided in terms of the noise cones impacts on existing approvals, communities and various growing concerns regarding farming operations, all direct impacted by noise. How is this particular study not a critical item to address upfront and eliminate any possible speculation. 2.5. ADDITIONAL COMMENT 2.5.1. CWA FACEBOOK POST ON 23 AUGUST 2024 Continuous misleading and misinformation are being shared on the press and social media, pre-emping the EIA and other processes, misleading the public and I&AP's and people actively involved in	• The NEMA EIA process has two distinct phase – Scoping Phase and Impact Assessment Phase. The development of impacts and mitigation is required within the Impact Assessment Phase and cannot be collapsed within the Scoping Phase. Therefor in order to comply to the NEMA Regulations for the prescribed EIA process, the Noise Impact Assessment will only be available in the Impact Assessment Phase for comment. All registered I&APs will be notified when this public participation period commences. 2.5. ADDITIONAL COMMENT 2.5.1. CWA FACEBOOK POST ON 23 AUGUST 2024 Please note the CWA facebook page does not form part of the PPP for the proposed project.

			reviewing the information at hand. It should be noted that this information is being shared and published on the CWA Facebook Page, as per screenshot below, especially referring to "With construction anticipated to start early next year" when the NEMA appeal period is anticipated in September 2025.  Cape Winelands Airport Cape Town is gearing up for its vibrant and bustling peak season. Currently, international airlines tend to increase their flight frequencies, while the seasonal carriers return, sometimes as early as mid-September. This translates into our tourist attractions welcoming an increase in their visitors as well as increased bed nights in our beautiful hotels. At Cape Winelands Airport we are eagerly anticipating our future role in the city's dynamic travel and tourism landscape. With construction anticipated to start early next year – should all of the approvals be in place – the goal is to commission our transformed airport and its new infrastructure in 2027. The airport will play a key role in connecting travellers with the rich experiences and stunning beauty of the Cape Winelands. Our vision extends beyond being a mere transit point. We are creating a destination that embodies the essence of the region while integrating the latest in travel technology. Our vision is to blend the region's allure with modern conveniences. With our state-of-the-art facilities and dedication to first-class service, Cape Winelands Airport will offer an experience that is as memorable as the destination itself. We cant wait to contribute to the vibrant energy of Cape Town and look forward to welcoming you to your gateway to the world. Stay connected for updates and be a part of our journey.	CWA Response: CWA believes that with all necessary approvals and regulatory compliance achieved, construction could commence as early as 2025. This timeline depends on the timely completion of environmental impact assessments, securing the required funding, and obtaining final approvals from local, provincial, and national authorities. The project management team is focused on meeting deadlines and ensuring that pre-construction activities, such as site preparation, procurement of materials, and contractor selection, are completed efficiently. Additionally, CWA is engaging with local communities, stakeholders, and potential partners to ensure the project meets regulatory standards and aligns with broader socio-economic and environmental goals, fostering long-term support and collaboration essential for the airport's successful development.
		2.5.2. GREENVILLE GARDEN CITY EXISTING LAND RIGHTS CONFIRMATION • Please refer to Appendix I for letter pertaining to Greenville Garden City's existing land rights, drafted by Richard Summers INC. 2.5.3 **Appendix I:** **Point 1:** We refer to the above matter.	2.5.2. GREENVILLE GARDEN CITY EXISTING LAND RIGHTS CONFIRMATION **Response to Appendix I** **Point 1:** Noted

			Point 2: More than 17 years have lapsed since Garden Cities commenced with the development approval processes. In this regard, Garden Cities undertook a detailed planning process to obtain the numerous development rights necessary in order to develop the Greenville Garden City, including subdivision and rezoning of the property (including amending the urban edge and the approval of the Conceptual Land Use and Phasing Plan (referred to as the "Concept Plan")), as well as obtaining Environmental Authorisation in terms of the National Environmental Management Act ("NEMA"). **Point 3:** Due to the scale of the Greenville Garden City development, a phased approach was adopted and approved by the City of Cape Town to inform, facilitate and guide the planning methodology and required statutory processes. To this end, the phased approach of negotiation, planning and approvals was considered appropriate to provide a mechanism to plan and manage the development of large / strategic urban development areas, such as the Greenville Garden City development.	**Point 2:** CWA Response: While it is true that Garden Cities has invested significant time and effort over the past 17 years in obtaining the necessary development rights for the Greenville Garden City, this does not preclude other developments, such as CWA, from proceeding. The lengthy process undertaken by Garden Cities reflects the complexity of their project, but the approval of one development does not grant exclusive rights to the surrounding area nor prevent further growth. CWA is following the proper channels, including rigorous Environmental Impact Assessments under NEMA, to ensure that it complements existing developments. The urban landscape is dynamic, and the coexistence of multiple projects is both possible and beneficial. The approvals obtained by Garden Cities do not imply that no other significant developments should occur in the vicinity. Instead, both projects can contribute positively to the region's growth, adhering to the same stringent regulatory frameworks that ensure balanced and sustainable development. **Point 3:** CWA Response: While the phased approach adopted by Garden Cities for the Greenville Garden Cities development is indeed appropriate for managing large-scale urban projects, it does not imply that other significant developments, such as CWA, cannot proceed concurrently. The strategic phasing of Greenville Garden City is designed to ensure orderly growth and efficient use of resources, but it does not confer exclusivity over the region's future planning and development. CWA is also being developed using a phased approach, guided by a carefully considered planning methodology that aligns with regional development goals and statutory requirements. Both projects are subject to the same overarching planning frameworks, ensuring that they can coexist and contribute to the broader urban landscape in a complementary manner. The presence of multiple phased developments in close proximity is a common occurrence in dynamic urban environments and can lead to

		Point 4: The submission and approval of the Concept Plan was the first component of the phased approach as the Plan outlined the overall development principles and structuring elements. Further, the approval of the Concept Plan forms the basis (and thereby guides) further applications and plans which are to be submitted to the City for further subdivision / rezoning / site development / building plans for the remainder of the phases contemplated in the Concept Plan. **Point 5:** The entire Greenville Garden City development as depicted in the Concept Plan approved by the City (and as approved by the Department of Environmental Affairs and Development Planning in terms of NEMA) will include a range of housing opportunities, with 16 500 residential units being proposed over the 6 phases. Employment opportunities will be generated through the commercial, office, retail and industrial zones as well as educational facilities and other public facilities. **Point 6:** Having regard to the above, the proposed Project will have an adverse socio-economic impact on the Greenville Garden City	mutually beneficial outcomes when managed within the established regulatory frameworks. **Point 4:** CWA Response: While the submission and approval of the Concept Plan for Greenville Garden Cities was indeed the first step in guiding the phased development of that project, it does not create an unassailable framework that precludes other developments, such as CWA, from proceeding. The Concept Plan, while essential for coordinating the internal structuring elements of Greenville Garden City, does not constrain the broader regional planning landscape. Additionally, it is important to note that on the 7th of June 2022, the City of Cape Town issued a zoning certificate confirming the lapsed rights in respect of Erf 4, due to no submission being made for its subdivision within the allowed five-year period. Furthermore, according to the Department of Environmental Affairs and Development Planning (DEADP), environmental authorisation (EA) must be acted upon within a set timeframe, with any failure to commence activities within the maximum 10-year period resulting in the lapse of the EA. Garden Cities, having extended their EA for a period of 10 years in 2022, failed to commence construction activities within that period, leading to the lapse of their EA. As a result, a new application for EA will have to be lodged by Garden Cities. This situation underscores that the regulatory environment requires ongoing compliance and responsiveness to changing conditions, and no single development is immune from these requirements. **Point 5:** CWA Response: Noted but needs to be taken into consideration in light of Point 4 above. **Point 6:** CWA Response: The assertion that CWA will have an adverse socio-economic impact on the Greenville Garden City

		development and the land use rights acquired by Garden Cities. It is precisely this type situation that the Court in the Fuel Retailers1 case sought to avoid, remarking that a legitimate object of the EIA process is to identify and predict the actual or potential impact on socio-economic conditions.2 The Fuel Retailers case is particularly relevant as the Court held that the impact of a proposed development on the feasibility of other developments is required to be carefully assessed during the EIA process. This has not been done. The impact on the feasibility of the Greenville Garden City development has not been evaluated, considered or assessed.	development is speculative and not grounded in a comprehensive understanding of the EIA process or the specifics of the CWA project. First, the Fuel Retailers case is often misunderstood. While the Court emphasized the importance of assessing the socio-economic impact of a development, it did not create a blanket prohibition on projects that might influence other developments. Instead, it mandated a balanced consideration of both positive and negative impacts, ensuring that all relevant factors are taken into account. In the case of CWA, the EIA process has been rigorous and thorough, with socio-economic factors being a key component of the assessment. However, it's important to note that the impact assessment phase of the EIA is still ongoing. To comment on the potential impacts without the full spectrum of specialist inputs is premature and potentially misleading. The EIA process is designed to be iterative and comprehensive, involving multiple stages where various impacts, including socio-economic, are evaluated with input from a range of experts. Furthermore, the claim that the impact on the feasibility of Greenville Garden City has not been evaluated is incorrect. The EIA process inherently involves a comprehensive evaluation of all relevant socio-economic factors, including the potential interaction with nearby developments. This evaluation includes not only the potential challenges but also the opportunities for complementary growth and mutual benefits. It's also crucial to recognise that developments such as CWA and Greenville can coexist and even enhance each other. The introduction of a significant infrastructure project like CWA can increase the attractiveness of the region, leading to greater demand for residential, commercial, and industrial spaces, which can, in turn, benefit developments like Greenville. The Fuel Retailers case does not serve as a barrier to CWA but rather underscores the need for a balanced and well-considered

		Point 7: There is a legal obligation on the competent authority to have regard to issues such as the impact on the Greenville Garden City development because it gives rise to potential adverse socio-economic impacts. A legitimate concern is established where the failure to investigate potential adverse socio-economic impacts and to avoid adverse economic impacts, would give rise to adverse socio-economic consequences for the potential adverse socio-economic impacts. At this stage, the impact of a proposed Project on the feasibility of the Greenville Garden City development has not been carefully assessed during the EIA process. **Point 8:** In addition to the above, the need for and desirability of the proposed Project must be specifically and explicitly assessed in the EIA process insofar as it relates to both the individual and cumulative impacts of the proposed Project. An integral aspect in determining	approach, which has been adhered to in this instance. The socio-economic impact on Greenville Garden City is being carefully considered within the EIA process, and any conclusions drawn at this stage without full specialist input are premature. The potential for both developments to thrive together remains strong. **Point 7** CWA Response: While it is true that the competent authority has a legal obligation to consider potential adverse socio-economic impacts during the Environmental Impact Assessment (EIA) process, it is important to recognize that this process is designed to be comprehensive and iterative. The EIA for the CWA project is ongoing, and the impact phase, which includes a detailed assessment of socio-economic factors, is still to come. Commenting on the potential impacts at this stage, without the full spectrum of specialist inputs, is premature and may lead to unfounded conclusions. Moreover, the assertion that the feasibility of the Greenville Garden City development has not been carefully assessed is not accurate. The EIA process inherently involves evaluating the cumulative impact of developments, including the potential interactions with existing and proposed projects. The Greenville Garden City development is not immune to these assessments, particularly given the recent lapsing of rights in respect of Erf 4 and the need for Garden Cities to reapply for Environmental Authorisation (EA) due to a failure to commence activities within the maximum 10-year period allowed by the Department of Environmental Affairs and Development Planning (DEADP). This situation underscores that all developments, including Greenville Garden City, are subject to the same regulatory frameworks and must demonstrate ongoing compliance with environmental and planning requirements. **Point 8:** CWA Response: The EIA process inherently includes a thorough evaluation of these factors, with detailed studies on the socio-economic, environmental, and infrastructural implications of the CWA project. The need and desirability of the

		the need for and desirability of the proposed Project requires an assessment of the impacts posed to the existing land use rights held by Garden Cities for the Greenville Garden City development.		airport are central to the EIA, and our phased development approach ensures that the project remains aligned with sustainable development and regional planning objectives. While we recognize the complexity of assessing cumulative impacts, we are committed to a transparent and comprehensive analysis that addresses these concerns in the broader context of regional growth and environmental stewardship.
		Point 9: The Guideline on Need and Desirability, 2014 aids in determining whether the proposed Project contributes to or detracts from the sustainability of surrounding developments. In this regard we note the following: **Point 9.1:** The proposed Project does not compliment the future use of the surrounding area, i.e. the future phases of the Greenville Garden City development3 ;		**Point 9.1 CWA Response:** We respectfully disagree with the assertion that CWA does not complement the future use of the surrounding area. On the contrary, the CWA project has been carefully planned with a strong focus on integrating with and enhancing the broader regional development goals, including those of Greenville. The airport is expected to bring significant socio-economic benefits to the region, including improved accessibility, job creation, and increased investment opportunities, all of which can positively contribute to the success of Greenville's future phases. We believe that, through ongoing collaboration and thoughtful planning, CWA can coexist harmoniously with the Greenville Garden City development, creating a synergistic relationship that benefits the entire community.
		Point 9.2: The proposed Project is not in-line with the general planning for the area as (1) approved by the City in terms of the Concept Plan and (2) approved by the Department of Environmental Affairs and Development Planning in terms of the environmental authorisation issued under NEMA which forms the basis of the land use rights held by Garden Cities4 ;		**Point 9.2** CWA Response: We respectfully disagree with the assertion that the proposed project is not in line with the existing planning frameworks. While we acknowledge that the Concept Plan and environmental authorisation under NEMA are important guiding documents, it's crucial to recognize that regional development is dynamic and requires adaptive planning. The CWA project has undergone extensive consultation and has been designed to complement the broader regional objectives, including those established by the City and the Department of Environmental Affairs and Development Planning. Moreover, the project is aligned with the long-term vision of sustainable growth and economic development for the region. We believe that with continued dialogue and

			conversation, the CWA project can be harmonized with the planning frameworks to support the mutual goals of all stakeholders involved.
		Point 9.3: The proposed Project does not encourage socio-economically sustainable land development practices and processes when considered alongside the land use rights held by Garden Cities5 ;	**Point 9.3 CWA Response:** We respectfully disagree with the assertion that the CWA project does not encourage socio-economically sustainable land development practices. The CWA project is specifically designed to foster regional economic growth, create substantial employment opportunities, and improve connectivity, all of which are key pillars of socio-economic sustainability. When considered alongside the land use rights held by Garden Cities, the CWA project does not conflict with but rather complements and enhances the broader development objectives of the region. The project introduces new economic activities that can bring long-term benefits to the community, supporting a more diversified and resilient economy.
		Point 9.4: The proposed Project will not result in the equitable distribution of impacts in the long-term as the proposed Project will disproportionately impact those that will live in homes to be constructed in the planned (future) phases of the Greenville Garden City development6 ;	**Point 9.4:** CWA Response: While we understand the importance of ensuring that all communities are treated fairly, we respectfully disagree with the assertion that the CWA project will disproportionately impact future residents of the Greenville. The planning and assessment of the CWA project have been undertaken with a strong commitment to minimizing and mitigating any potential negative impacts on surrounding areas, including Greenville. Comprehensive studies have been conducted to ensure that factors like noise, traffic, and environmental impacts are managed effectively, with mitigation measures in place to address these concerns. Additionally, the long-term benefits of the CWA project—such as job creation, enhanced infrastructure, and improved accessibility—are designed to positively impact all residents in the region, including those in Greenville. By fostering economic growth and providing new opportunities, the project aims to contribute to the overall well-being of the community, ensuring that the benefits are broadly and equitably shared. We remain

		Point 9.5: The size, scale, scope and nature of the proposed Project in relation to its location and other planned developments in the area (specifically the Greenville Garden City development) results in a development that will not contribute to social and economically sustainable development in the short and long term. This is largely due to the impacts of the proposed Project on the feasibility of the Greenville Garden City development which consists of amixture of low-, middle- and high-income housing opportunities[7]. In this regard, a large portion of the Greenville Garden City development caters for Reconstruction and Development Programme housing.	committed to ongoing engagement with all stakeholders to ensure that the development is balanced and beneficial for everyone involved. **Point 9.5** CWA Response: We respectfully disagree with the assertion that the size, scale, scope, and nature of the CWA project will undermine the social and economic sustainability of the region, particularly in relation to Greenville. The CWA project has been meticulously planned to align with the broader regional development goals, with careful consideration given to its location and the surrounding developments. Rather than detracting from the feasibility of the Greenville development, the CWA project is poised to enhance the area's overall economic landscape by creating new job opportunities, stimulating local businesses, and improving infrastructure. These benefits are especially significant for mixed-income communities, including those supported by the Reconstruction and Development Programme (RDP) housing, as they contribute to upward social mobility and increased access to economic resources. We believe that, through collaborative planning and the implementation of appropriate mitigation measures, the CWA project can coexist harmoniously with Greenville, providing a foundation for long-term sustainable development that benefits all residents. Our commitment remains focused on ensuring that the CWA project contributes positively to the social and economic fabric of the region, both in the short and long term.
		Point 10: Based on the information in the EIA process for the proposed Project, there is no basis to suggest that the mitigations proposed will be a failsafe mechanism for protecting the viability of the Greenville Garden City development. There is insufficient information in the EIA process to guarantee that anticipated impacts will be avoided and/or mitigated. In the absence of relevant information, the competent authority should adopt a more cautious approach.	**Point 10** CWA Response: We appreciate the need for thoroughness and caution in assessing potential impacts, particularly concerning the viability of the Greenville development. However, we respectfully disagree with the assertion that there is insufficient information or that the proposed mitigations lack a solid basis. The EIA process is designed to be comprehensive, involving detailed studies and expert consultations to identify potential

			impacts and develop effective mitigation strategies. While no mitigation can be guaranteed as entirely failsafe, the proposed measures have been carefully crafted based on best practices and the latest environmental and socio-economic data. Additionally, the EIA process is iterative and adaptable, allowing for the incorporation of additional information and refinements as needed to address emerging concerns. In this context, adopting an overly cautious approach may hinder the balanced development of the region, potentially delaying the benefits that the CWA project can bring to the community, including to Greenville. We remain committed to transparency and collaboration, ensuring that all stakeholders are engaged and that the development proceeds in a manner that is both responsible and beneficial for the region as a whole.
		2.5.3. POTENTIAL NOISE CONES IMPACTS (based on CTIA noise cones) Please refer to Appendix II • In the absence of the critical information related to noise cones (that has been requested on several occasions and for an extended period) and based on the various social media and other media outlets, the applicant has repeatedly compared themselves to be in similar in nature and step up from the Cape Town International Airport, catering for similar and larger aircrafts and continued growth over the short-medium-long term period, ultimately resulting in similar noise cones as that of CTIA. Again, in the absence of said noise cones and to fully understand the potential impacts, Garden Cities had no other recourse than using CTIA's noise cones as a guide. We view the absence of the noise cones as a substantial oversight and flaw in the environmental process; especially considering the exciting rights being impacted on	2.5.3. POTENTIAL NOISE CONES IMPACTS (based on CTIA noise cones) CWA Response: As previously stated, the Noise Impact Assessment will form part of the Impact Assessment Phase of the proposed project. All registered I&APs will have a 30-day commenting opportunity to comment during this phase. Comparing CWA to Cape Town International Airport (CTIA) is not appropriate, as it doesn't account for the significant differences between the two developments. At CWA, we've never claimed to be similar in nature to CTIA. The operational scale, aircraft mix, and geographic considerations are distinctly different. The current absence of noise cone data should not be seen as a flaw or oversight in the environmental process. The environmental impact assessment is a thorough, phased approach where various factors, including noise impact, are comprehensively studied. The relevant noise cone data will be provided during this process, ensuring it is based on accurate and context-specific information rather than assumptions drawn from unrelated

		The following documents were shared and have been included in Appendix F (C238): • *Appendix I* • *Appendix II* • *SANS10103 Extract* *Anton Bredell Letter Kindly confirm receipt of our letter*	scenarios. Once available, this data will be shared and analysed in collaboration with all stakeholders, including GC, to address concerns with accurate and relevant information. *Anton Bredell Letter- Receipt confirmed.* CWA Response: The precedent set by the Minister of Environmental Affairs and Development Planning on the 9th of May 2011, where he ruled on the noise level limits at Cape Town International Airport has established a clear stance for DEADP regarding noise level limits (LRdn) for residential developments around airports. Although DEADP lacked a formal policy, it tried to adhere to SANS 10103 guidelines, which recommend that urban residential areas should not exceed an LRdn of 55 dBA. This limit was supported by amendments to the Noise Control Regulations, with the proviso that these limits should not be significantly exceeded. DEADP recognizes that strict adherence to a 55 dBA LRdn contour can limit land availability for residential use, though it remains suitable for commercial and industrial purposes. The precedent set by the Minister also makes it clear that DEADP will support residential developments on land exposed to noise below an LRdn of 65 dBA.
239	Janessa Stockhall - **Village Action Network**	*Email dated 26 August 2024:* 1. Please see attached response from Village Action Network. *Letter received via email dated 26 August 2024:* Comments and input on the proposed Cape Winelands Airport 1. Village Action Network (V.A.N) is a registered NPC. Our focus is on building thriving communities by networking, advocating and connecting resources. We have been actively operating in the greater Durbanville area since 2020 and work closely with the communities, NPO's, NGOs and community leaders. We have a very good understanding of both the Fisantekraal community as well as	*Email response provided 26 August 2024:* 1. Thank you for your email and attached comments. Response to letter: 1. Noted

		the Durbanville community in terms of challenges and community assets. As such, our comments and concerns come from a place of being deeply connected to the people of the areas who will be immediately and directly affected by the proposed new airport. 2. NOISE & ENVIRONMENT 2.1. An immediate concern is how close the airport would be to the community of Fisantekraal. The report suggests 2 km is the distance. This is incredibly close. Fisantekraal is an economically vulnerable community who already struggles with high numbers of unemployment, substance abuse and gender based violence. Keeping children in schools is already a challenge without adding noise and air pollution to the mix. This community has one community clinic to service the entire area which already does not provide a full range of services. Should the communities health suffer, they already struggle to access the public healthcare system due to overcrowding and the challenges of having to pay for transport to clinics and hospitals outside their immediate area. Add in unemployment and finances and we have a commmunity which is just being further disadvantaged. 2.2. The potential impact of the increase in traffic, noise, air pollution and other negative elements such as gangterism and organised crime, has a high probability of having a major impact on the community of Fisantekraal. 3. Law Enforcement 3.1. The community of Fisantekraal has a high crime rate with no police station based in the area. (There is a satelite station which is only open during office hours.) The area falls under Durbanville SAPS who is severely under-resourced. They cover the Fisantekraal area as well as the Durbanville area with 4 police vans for the entire area. Potential passengers, employees of the airport and construction staff will be vulberable to attacks as they travel to and from the CWA. The existing high crime rate will be exacerbated by the influx of opportunistic law breakers to the area. This will have a direct effect on the safety and security of all the areas within 20km but most	2. 2.1. The comment is noted. A Noise Impact Assessment, Air Quality Impact Assessment and Socio-economic Impact Assessment forms part of the Impact Assessment Phase for the proposed project. All registered I&APs will be notified of the opportunity to comment once this phase commences. 2.2. Noted 3.1. CWA response: The CWA core group will bring a strong law enforcement pedigree to the region. The development of CWA will augment the urgency to build and equip the region with law enforcement resources. The CWA team has started a proactive risk management analysis to implement mitigation on multiple risk levels. Passengers, crew, valuable cargo, business and service providers alike expect a safe journey to and from the airport and it will be detrimental if the outer perimeter is not addressed.

		especially the vulnerable community of Fisantekraal. The community already doesn't have the help they need with regards to their safety and don't have the resources to pay for private security. The addition of new criminal elements could be very dangerous for this community. If this is not well managed we could even go so far as to say that we could potentially create another Cape Flats type situation in terms of crime and gangsterism.	While there is a shared responsibility among multiple security entities to take the lead and collectively address risks and mitigate threats in the outer perimeter, the impact of the airport security plan demands a proper security footprint in the surroundings and as such will address security challenges that could threaten the safety of the airport or its users. Activities associated with the airport, including anticipated risks and mitigation, are considered from the onset to avoid future security challenges for passengers, crew, service providers and industry. The plan demands and aims to enhance security and also address security gaps in the immediate region.
		3.2. The area of Fisantekraal has been undergoing a massive growth and development phase with the City of Cape Town and Garden Cities since 2016 with a total of 16000 new homes being planned to hand over. The census numbers from 2011 are so out of date as to be completely irrelevent to the socio economic impact report. The last numbers that we have is that the area is already sitting at approximately 29000 people, with these numbers only set to increase as new houses are built and handed over.	3.2. Specialist response: The figures used are the only available at this time. The specialist will consider the comment and look for a credible figure to compare to. If needed the IA report will be updated.
		4. Low education and tertiary education levels 4.1. The aviation industry is quite skill specific while the community of Fisantekraal has a high unemployment level and a high number of people who can provide unskilled laboour. Given the realatively short time that this airport will need unskilled or medium skilled labour (mainly the building phase), what real benefit is there to this community in terms of permanent employment?	4. 4.1. CWA Response: Fisantekraal as the airports closest neighbour will remain a priority community which CWA would like to see be primary beneficiaries of the airport expansion programme. It is correct that employment opportunities will exist during construction. CWA is planning on assisting the community to get registered on the City's employment database via their EPWP with the intention of ensuring that the contractor recruits from the community.

			Employment opportunities will also exist once the airport is fully operational. An airport has a wide- and far-reaching value chain and with the airport expansion large numbers of employment opportunities will exist. It is the intention of CWA to employ from its neighbouring communities. From maintenance, landside and airside services to security to name a few, there will be many opportunities. As part of the EIA, CWA recently conducted a focus group with community leaders of Fisantekraal and Klipheuwel where skills training was also discussed. Where possible, CWA would like to partner with relevant educational institutions to look key upskilling requirements.
		5. Considering the many negative impacts on the surrounding communities of having a commercial airport so close to them, we would like written assurances that should the airport go ahead, CWA would give a firm commitment to the surrounding communities of Fisantekraal, Klipheuwel and Durbanville to create social and economic opportunites for these communities in which they are given preferential development and employment opportunities. We would ask that CWA be willing to work wth the existing NGO's, NPOs, schools,sports clubs and business forums to guarantee that the opportunities to benefit from the new development would start with those who will be the most negatively impacted.	5. CWA response: CWA has adopted an embedded sustainability approach – recognising the importance of ensuring that the airport does not only make an economic contribution but a social one too. CWA is committed to working with the communities closest to the airport as priority communities, with the aim of seeing them be benefactors of the airport. CWA will work with relevant institutions and adopt a collaborative approach. CWA has already engaged with the community leaders of Fisantekraal and Klipheuwel jointly. This is a practise that will continue, most especially where the communities are vulnerable.
240	Danielle Cronje – **MRCT**	*Email dated 26 August 2024:* 1. Kindly see attached MRCT's objection letter to the proposed CWA development and comments on the Scoping Application. *Letter received via email dated 26 August 2024:* 2. The Mosselbank River Conservation Team NPC (MRCT), comprising of 21 dedicated volunteers, works tirelessly to conserve the ecology of the Mosselbank valley-bottom wetlands and river corridor. As one of the few	*Email response dated 26 August 2024:* 1. Thank you for the email and the comments provided. Response to letter: 2. The objection is noted.

		environmental organizations in the area advocating for the environmental health and well-being of residents living near these spaces, we strongly object to the development of this project. Our objection is based on the cumulative impact this expansion will have on the well-being of the Fisantekraal and Greenville communities, now and for the future generations. 3. PUBLIC ENGAGEMENT AND PERCEPTION 3.1. Reference to the following statement: “Embracing the role that CWA can play in improving lives and livelihoods it will actively work with the communities closest to the airport.” 3.2. At a meeting held in Fisantekraal on 8 May 2024, the applicant spoke about having a “dream,” highlighting terms like “employment opportunities” and “skill development.” While these terms resonate with a community eager for sustainable job opportunities, using job creation as a means to "win over" the community suggests a lack of understanding and insight into the true needs of the area. The focus should be on creating genuinely sustainable opportunities that improve the quality of life for residents.	3. 3.1. Noted 3.2. CWA response: CWA acknowledges the importance of job creation as a critical component in addressing the needs of a community eager for sustainable employment opportunities. This was underscored during our meeting on the 8th of May 2024, where over 400 participants were present, and when asked whether they were unemployed, 95% of them raised their hands. This overwhelming response highlights the urgent need for job creation in the area. CWA sees employment not just as a goal, but as a genuine requirement essential for the well-being and development of the community. Employment provides stability, purpose, and the means for individuals to contribute positively to the growth and improvement of their surroundings. It is a cornerstone of a thriving, sustainable community. However, in response to our initiatives, MRCT has raised an objection, claiming that CWA lacks understanding and insight into the "True needs" of the community. Despite this assertion, MRCT has not provided clarity or specifics on what these "True Needs" entail. CWA remains committed to its mission of focusing on creating genuinely sustainable opportunities that will improve the quality of life for the residents in the area. Our approach is rooted in addressing the immediate and long-term needs of the community

			as voiced by its members, particularly in the area of sustainable job creation.
		3.3. Only a certain demographic will benefit from this project, people with business interest, people who are financially capable to travel and skilled labour. How many residents in Greenville, Fisantekraal and Klipheuwel will actually use the airport to travel? How would local residents benefit from the operation of the airport (other that job creation and skill development?).	3.3. CWA Response: MRCT in this point contradicts the point it made in 3.2 but is correct in its assertion that the residents will benefit from job creation and skills development. MRCT's assertion that residents would not benefit from having an airport nearby due to their lack of financial capability for air travel overlooks the broader economic and social advantages that such a development brings. The construction and operation of an airport like Cape Winelands Airport (CWA) generate substantial employment opportunities, both directly and indirectly, in sectors like transportation, hospitality, and retail, which can significantly improve the residents' standard of living. Additionally, CWA will offer skills development and training programs, equipping locals with valuable expertise that enhances their employability. The presence of the airport also leads to infrastructure improvements, attracting businesses and investments that stimulate the local economy. Even if residents do not frequently use air travel, the increased connectivity fosters tourism, business partnerships, and cultural exchanges, all contributing to a more vibrant and prosperous community. Furthermore, CWA is committed to engaging with the community through initiatives that ensure the airport's benefits are widely shared, ultimately enhancing the overall quality of life for the residents.
		3.4. We also want to obtain clarity regarding the realistic amount of jobs that will be created locally as an article mentioned 60 000 opportunities. In what sectors are these jobs, are they for professionals, skilled, semi-skilled of unskilled individuals?	3.4. CWA Response: Jobs created at airports span a wide range of sectors and skill levels, catering to professionals, skilled workers, semi-skilled, and unskilled individuals. Professional roles include aviation management, engineering, finance, IT, and legal services, offering opportunities for those with specialized education and experience.

			Skilled positions encompass technical support, security, customer service, and logistics, requiring specific training and expertise. Semi-skilled jobs are found in ground handling, hospitality, retail, and transportation services, often requiring some level of experience or certification. Unskilled roles include general labour, janitorial work, and entry-level customer service, providing accessible employment opportunities for those with minimal qualifications. This diversity in job creation allows airports to significantly contribute to local employment, benefiting a wide range of workers across different sectors and skill levels.
		3.5. What is the number of individuals that can be employed and trained from the Fisantekraal, Greenville and Klipheuwel community during the operational phase (as this is where the sustainable employment opportunities are)?	3.5. CWA Response: The distribution of jobs typically includes a significant portion in the semi-skilled and unskilled categories. Approximately 30% to 35% of the positions are likely to be semi-skilled roles, such as ground handling staff, retail workers, and transportation services, while another 30% to 35% are unskilled positions, including baggage handlers, cleaners, and manual labourers. These roles, which require minimal training, provide accessible employment opportunities for a broad section of the workforce, highlighting the airport's crucial role in supporting the local economy and offering diverse job opportunities across various skill levels.
		3.5.1. Reference to article - "An estimated 60 000 jobs will be created with the expansion of the existing Cape Winelands Airport into a second major airport for Cape Town." (https://www.africaninsider.com/companies/takeoff-r7bn-cape-winelands-airport/)	3.5.1. Refer to 3.4 response.
		3.5.2. Based on employment rate stats from CTIA in 2019, we find it difficult to believe 60000 jobs will be created.	3.5.2. The socio-economic impacts will be included in the impact assessment phase of the EIA.

		3.5.2.1. Research has shown for every long-haul flight operated over the course of a year, the airport can support 3 000 jobs. 3.5.2.2. CTIA employs nearly 700 people and the broader airport value chain employs significantly more people, approximately 20 000 (https://www. 3.6. Reference to response from EAP on page 123 (Appendix 30). "As described above two formal engagements outside of the EIA process were held: Engagement 1 - Only with members of the Fisantekraal community (31 July 2021) and Engagement 2 - Klipheuwel and Fisantekraal community members (24 October 2023)." 3.6.1. Its noted that several engagements was been held with surrounding communities, such as the ward councillors (and note the Ward 105 councillor that served in the period mentioned above is no longer the local ward councillor). What information was shared with him or the City of Cape Town was not shared with all the interested and effected parties in Fisantekraal and Klipheuwel? 3.6.2. The applicant cannot refer to these engagements as it was not part of the PPP and therefor suggest these engagements are with the wider community and be properly recorded. Because how would the public know what was discussed in these meetings? 3.7. Reference to response from EAP on Page 123 "A meeting was held outside of the EIA process by the CWA team with the Fisantekraal community (facilitated by community leaders)" 3.7.1. As we mentioned in the public meeting, we questioned who exactly the applicant's engaged with? The Fisantekraal and Greenville Community is complex with many role players and includes various NPO's, Community based organizations, Business Forums (some that are self proclaimed), Taxi Associations, churches, schools and private residents. Who defines as the applicants community leaders? Only a certain	3.5.2.1. Refer 3.4 response 3.5.2.2 Refer 3.4 Response 3.6. 3.6.1. CWA response: No information was shared with any councillor that was not shared with the community. 3.6.2. CWA Response The Applicant is within rights to engage outside of formal EIA processes with focus groups. 3.7. 3.7.1. CWA Response Typically, community leaders are recognized based on their influence, involvement, and representation within the community. These leaders may be elected representatives from local organizations, heads of NPOs, or individuals who have earned the trust and respect of the community through their active participation in community affairs. In some cases, community leaders may also be defined by consensus among

		political party's community leaders/activists ? If so, that is incredibly biased and exclude a majority of the community being and staying informed.	the key stakeholders or by the specific mandates of the organizations they represent.
		3.8. When will the questions, that was raised at the public Fisantekraal meeting, be addressed? How will the EAP get it to the people that was at the meeting?	3.8. Questions comments raised during the Fisantekraal meeting were recorded and responded to within the meeting
		3.9. Refer to a Facebook post made on 23 August 2024 on the CWA Facebook Page that stated construction is anticipated to start early 2025, however I&AP's can submit appeals until September 2025? How is this possible? CWA response is that they are committed to a fair and transparent system - we view this comment as not accurate based on all the previous points mentioned.	3.9. CWA Response: CWA will only proceed with the construction of the airport once all necessary approvals have been secured. This includes obtaining all required permits, clearances, and endorsements from relevant regulatory bodies, local authorities, and stakeholders. CWA is committed to ensuring that the project adheres to all legal, environmental, and community standards before any construction activities begin, reflecting our dedication to responsible development and regulatory compliance.
		3.10. It is concerning that the public is being led to believe that this airport project is a certainty, with the relative authority perceived to support the project, including statements that urban boundaries will be amended specifically for this development (Based on the Northern District Plan). Reference to articles: https://iafrica.com/the-city-of-cape-town-has-endorsed-a-potential-second-airport/ https://www.thesouthafrican.com/news/city-of-cape-town-endorses-new-winelands-airportbreaking-18-december-2023/ https://www.afric-invest.com/south-africa/cape-town-endorses-second-airport-for-the-mothercity-city-mayoral-committee-member-for-economic-growth-james-vos-said-the-r7-billionairport-set-to-open-in-2027-would-create-jobs-and-attract-mor/	3.10. CWA Response: CWA will only proceed with the construction of the airport once all necessary approvals have been secured. This includes obtaining all required permits, clearances, and endorsements from relevant regulatory bodies, local authorities, and stakeholders. CWA is committed to ensuring that the project adheres to all legal, environmental, and community standards before any construction activities begin, reflecting our dedication to responsible development and regulatory compliance.
		3.11. This raises questions about the fairness and consistency of the process — will others seeking to develop, outside the urban edge, receive the same leniency and support? Furthermore, it undermines the integrity of the EIA process, as well as the subsequent Environmental Authorization conditions and Land Use Management approvals. The narrative being presented suggests that this process is merely a formality, and that	3.11. The comment is noted.

		objections—particularly those from less influential community members—may be disregarded. We are very concerned how I&AP's will respond to misleading information. It can create division within our communities. Some individuals might support the development based on false positives, while others oppose it based on different or more accurate information, leading to conflicts and weakening our communal ties. 4. IMPACT OF THE AIRPORT ON OUR LOCAL CONSERVATION EFFORTS 4.1. We note from the specialist studies that the habitat quality is mostly degraded which makes the offset solution a convenient one as no other alternatives are even being investigated (its the airport expansion of nothing). Should part of the EIA not identify other alternatives, different layouts or other properties for this development? A solution that will not change and disrupt this community's lives forever?	4. 4.1. Please refer to Section 8.1 of the Scoping report: No alternative site has been considered on the basis that: • CWA is an existing operational and licensed airport that has been in existence for 80 years, operating at the current site. • The expansion of CWA is being developed on a purely commercial basis and without government funding, on the principles of financial sustainability and viability, therefor it aligns with the Policy Statement 15 in the White Paper on Civil Aviation Policy (2017). • As an upgrade of an existing airport rather than choosing a new site it aligns with the preference expressed in the NADP (2015) for "the upgrading of existing airports over development of green-field airports." • The land belonging to CWA is already zoned as an airport. • The CWA properties is centrally located with various existing access points from regional roads. • The CWA properties has access to groundwater that can sustain 75% percentage of the water demand. • The site can tie into existing and future planned municipal service infrastructure. • Most of the application area earmarked for expansion is already owned by Cape Winelands Airport Ltd or

			Capewinelands Aero (Pty) Ltd or in companies controlled by it. • The potential cost of establishing an airport to the proposed project scale at an alternative greenfield site would prove to be excessive given that the current site and properties are already available, the site is operational as an airport and could be optimised due to available land to accommodate the proposed project. • Given the location, CWA is well positioned to provide a convenient and safe airport option for residents in the Cape Metropole and beyond. Road access to the site is through various safe routes and the site does not pose the restrictions and risk to expansion through squatting and land invasion. • Considering topography, required airspace integration and exclusion zones (such as the Koeberg nuclear zone) an appropriate alternate site is not available in the region. No alternative site could be identified that complies with all of the following locational criteria: • a slope of less than 1 % over 4.3km and in the direction of the prevailing winds, • a site that is not located in a proclaimed nature reserve, • a site that is not in a physically built-up area, or so close that landings and take offs will be problematic. • a site that falls outside of the FACT controlled airspace, • and a site that is outside the Koeberg Nuclear Power Station (KNPS) exclusion zones. An airport should ideally be on the urban edge and not some distance outside or way inside the UDE. It needs to be close to urban infrastructure, but not in built-up areas. It needs to be accessible to freight and passengers with a well-established multi-

		4.2. When the Mosselbank River Rehabilitation project was initiated in 2017, the area was highly degraded, unsafe and dirty. Even with the many challenges since the inception of this project, we have seen the positive impact the rehabilitation has had not only on the ecology, but on the local community too. By keeping cattle away, excluding vehicles, limiting foot traffic and actively planting, we have seen the return of many bird species, including the Great Flamingo, amphibians, snakes, insects and so forth. We are trying to build up an ecosystem on the Mosselbank River that is an important stepping stones to many other green corridors. 	directional road network and close to rail. Lastly, the preferred site location is leveraging off an existing airport which is a long-established land-use in this location. Therefor there is no feasible and reasonable site / location alternative as this proposed project is for the expansion of an existing airport with existing aviation rights at this site. Response from specialist to 4.1 and 4.2: The comment regarding the degraded nature and conservation status of the depression wetland associated with the Greenville Garden City is noted. As part of the freshwater assessment, an offset investigation is currently being undertaken to rehabilitate the remainder of the seep wetland as well as the downgradient channelled valley bottom wetland with the aim of maintaining and where possible improving ecological functionality of these systems. The selected wetlands are within the same local catchment (of which a portion of the wetland that will be lost will be reinstated). As indicated in the freshwater report, the seep wetland associated with the CWA is highly degraded and have very limited ecological sensitivity. During the offset initiative preparation, it was determined that 6.74 hectares (ha) (but with a total loss of 7.44 ha which accounts for indirect impacts) of wetland habitat would be lost due to the proposed CWA development. To achieve the no net loss objective, the 7.44 ha loss translates into a residual impact of 3.97 functional hectare equivalents (HaE) and 13 habitat HaE of wetland to meet the no net loss objective. To achieve this, the remainder of the seep wetland and a portion of the downgradient CVB wetland (equating to a 40 ha area) has been identified to be rehabilitated. Rehabilitating these systems will improve their ecological condition by 1) keeping livestock out of the systems, 2) revegetating the wetlands with suitable wetland vegetation and 3) reinstating hydrological functionality of the systems. Ecosystem services is also anticipated to improve. As part of the offset investigation, roles and responsibilities will be described, which will include who will manage the offset habitat and its success. As the property in which the offset area is situated is owned/managed by CWA, CWA is committed to ensure that the wetland offset is successful and that the necessary authorities are involved, as required.

		4.3. What will the impact be of increased air traffic of large airplanes over the sensitive wetland areas? 4.4. The Mosselbank River is an important breeding ground for birds and amphibians, how will increased air traffic impact the breeding patterns? 4.5. How will the noise and air pollution from aircraft disturb the wetland birds breeding and feeding?	The wetlands associated with the CWA are not considered sensitive from a freshwater point of view. Air traffic is not anticipated to have significant impacts on the wetlands associated with the CWA. The Mosselbank River is also located ~ 1.5 km away from the CWA. It is therefore not anticipated that the CWA will have a significant impact on the Mosselbank River and the rehabilitative efforts that have been put in place in the conservation area. 4.3 Response from specialist: The wetlands associated with the CWA are not considered sensitive from a freshwater point of view. Air traffic is not anticipated to have significant impacts on the wetlands associated with the CWA. The Mosselbank River is also located ~ 1.5 km away from the CWA. It is therefore not anticipated that the CWA will have a significant impact on the Mosselbank River and the rehabilitative efforts that have been put in place in the conservation area. 4.4 & 4.5 Specialist response to 4.4 and 4.5: <u>Avifauna</u> Regarding the air traffic, it is important to note that Cape Winelands at present is an operational airport and as such, presents an existing baseline for noise impacts, which species appear to be tolerant of and have become accustomed to. However, the proposed airport will result in a notable upshift in terms of noise pollution in the area due to the nature of larger aircraft which will land at the new airport. Whilst it is possible that species present will initially be negatively impacted upon, with time species are likely to become habituated to the sound of aircrafts (as they currently are to light aircraft). Such can be readily seen by the presence of several species including Greater Flamingos at pans nearby OR Tambo and Cape Town International Airport. Furthermore, the proposed runway orientation will ensure that planes are not landing or taking off over the wetland system, with the parallel flight paths being approximately 2.1km away from the wetland system. Whilst planes

			are likely to still be heard at this distance, the volume of such is not expected to result in species abandoning/avoiding the rehabilitation/conservation sites. Several avifaunal and amphibian species are known to inhabit and readily breed within the wetland systems adjacent OR Tambo and Cape Town internation airport, indicating that the proposed runway is unlikely to pose a threat to avifaunal or amphibian breeding activities. Furthermore, current light aircraft already present a noise impact, and whilst to a lesser degree than larger aircraft, they do fly directly over the wetland systems, unlike the current flight path orientation of the proposed airport. <u>Amphibians:</u> Amphibians are sensitive to changes in their environment, however more so as a result of water quality, flow regimes and direct impacts to their habitats. Amphibian species are known to readily occur in areas of increased ambient noise, and as mentioned, the flight paths of the planes are unlikely to present a significant impact to amphibian species. Furthermore, low-frequency vibrations from aircraft do not appear to be a significant inhibiting factor to species, as several species inhabit the wetlands adjacent the Cape Town internation airport, including Red Listed Species. Consequently it must also be considered that the presence of the community and continued construction and operational activities in Garden Cities is likely to have had similar low-noise frequency impacts to species in the wetlands, including the continuous movement of trucks and cars.
		4.6. What are the frequencies expected for bird strikes at the airport and over Greenville?	4.6. CWA response The frequency of bird strikes at airports varies based on factors such as location, surrounding environment, and time of year. On average, commercial aviation in the United States experiences approximately 14,000 bird strikes annually, equating to about one

		4.7. Increase in air traffic over the Mosselbank River will impact and disturb migration patterns. Birds may then avoid the Mosselbank Valley-Bottom wetlands, leading to changes in population dynamics and potentially affecting species that are already vulnerable. 4.8. With the presence of Flamingos, the community has a scene of pride for this area, and contributes to the overall esthetics of the area. With the increase of air traffic, this esthetical value will be lost. Flamingos (2024) Cape Sand Frog (2024) 4.9. Amphibians are particularly sensitive to changes in their environment, making them vulnerable to disturbances caused by increased air traffic. 4.9.1. Many amphibians rely on vocalizations for mating and territorial behavior. How will the increased air traffic, which will lead to noise pollution, impact this? 4.9.2. Aircraft generate low-frequency vibrations that can penetrate the ground and water. Amphibians, particularly those with sensitive skin and hearing, might be disturbed by these vibrations, leading to stress and altered behavior. 4.9.3. Amphibians are often nocturnal, relying on darkness for protection from predators and for normal behavioral patterns. How will increased light pollution from airports and aircraft impact the amphibian populations?	strike per 10,000 flights~~. To~~ mitigate the risk of bird strikes, airports employ various wildlife management strategies. 4.7. & 4.8. Response from specialist: Regarding avifauna avoiding the Mosselbank Valley-bottom wetlands due to noise impacts, such is unlikely as species are readily observed in and around current large airports. As such, the presence of the airport is unlikely to result in a notable shift of bird flight paths to and from the Mosselbank Valley-bottom wetlands. Whilst avifauna may alter their flight paths to avoid the epicentre of the airport, they are likely to similarly re-adjust flight paths once past the active areas in order to reach their intended destination 4.9. Response from specialist: Amphibians are sensitive to changes in their environment, however more so as a result of water quality, flow regimes and direct impacts to their habitats. Amphibian species are known to readily occur in areas of increased ambient noise, and as mentioned, the flight paths of the planes are unlikely to present a significant impact to amphibian species. Furthermore, low-frequency vibrations from aircraft do not appear to be a significant inhibiting factor to species, as several species inhabit the wetlands adjacent the Cape Town internation airport, including Red Listed Species. Consequently, it must also be considered that the presence of the community and continued construction and operational activities in Garden Cities is likely to have had similar low-noise frequency impacts to species in the wetlands, including the continuous movement of trucks and cars.

		4.9.4. Constant noise and environmental changes due to increased air traffic can lead to chronic stress in amphibians. Stress can weaken their immune systems, making them more susceptible to diseases, which are already a significant threat to many amphibian species globally 4.10. Increased air traffic can have several impacts on small mammals, potentially affecting their behavior, health, and habitat. 4.10.1. Many small wetland mammals are nocturnal, relying on darkness for protection from predators and for carrying out their daily activities. Who will increased light pollution from the airport and aircrafts disrupt these patterns? 4.10.2. Pollution and habitat changes can affect the availability of food for small mammals. The impact of noise on small mammals should be investigated as some species use vocalizations for communication. Constant noise from aircraft can lead to heightened stress levels, which may cause changes in behavior such as increased alertness, reduced foraging, and changes in social interactions. 5. BULK POTABLE WATER SUPPLY	4.10. Response from specialist: Regarding the impacts to mammals and amphibians from light pollution, the ambient glow from the airport is unlikely to be of significance to fauna of in the wetland, due to the distances involved and mitigation measures presented. The faunal reports have recommended that as far as possible lights be inward and downward facing (as far as possible based on security and health and safety requirements), in order to minimise outward light distribution and sky glow. Furthermore, the proximity of the Garden Cities housing development and LED streetlamps pose a far higher risk and impact to nocturnal species (see below image). Similarly, the presence of the adjacent communities (cars, music and general activities) likely presents a comparable baseline noise level which in itself may impact on small mammals. These impacts as well as the general activities of the residents, including movements of people and domestic/feral animals, may likely pose a higher risk of behavioural change impacts than that of the proposed airport. 5.

		5.1. We note that the applicant will be completely reliant on groundwater supply and borehole for a short to medium term. We are concerned what impact this will have on the surrounding community and local ecosystems. 5.2. Extensive use of groundwater can lower the water table can affect nearby wetlands and rivers that depend on groundwater, leading to habitat degradation, loss of biodiversity, and reduced water quality. 5.3. The continuous demand during the operational phase could exceed the natural recharge rate of the aquifer, leading to long-term water scarcity in the region (considering how close we were to day Zero). 5.4. Heavy use of groundwater, especially during construction when water demand is high, can lead to over-extraction, reducing the water table and potentially depleting the local groundwater reserves. 6. We will provide further comment on the following topics once more information is made available: • Noise impact on surrounding communities • Light pollution impacts • Safety and Security Impacts • Air Pollution Impacts • Biohazards and the local conservation areas • Current Road infrastructure • Habitat offset (Where will the offset be? Who manages it?)	5.1. The WULA for the use from the boreholes is based on the sustainable yield and considers surrounding landusers and existing abstraction from the underlying aquifers. 5.2. The WULA for the use from the boreholes is based on the sustainable yield and considers surrounding landusers and existing abstraction from the underlying aquifers. There is no connectivity between deep level aquifer abstraction and surface wetlands at the points of abstraction. 5.3. The WULA for the use from the boreholes is based on the sustainable yield and considers surrounding landusers and existing abstraction from the underlying aquifers. 5.4. Abstraction will be metered and according to a WULA approved volume. 6. Noted
241	Natasha Bieding – **DEADP Directorate: Development Management (Region 1)**	*Email dated 26 August 2024:* 1. Please find this Directorate's correspondence attached regarding the following matter: THE PROPOSED EXPANSION OF THE CAPE WINELANDS AIRPORT ON PORTION 10 OF THE FARM NO. 724, REMAINING EXTENT OF THE FARM NO. 724, PORTION	*Receipt acknowledged by email 26 August 2024:* 1. Dear Ms Bieding; This serves as confirmation of receipt of your email and attached letter dated 26 August 2024, the contents of which is duly noted.

		23 OF THE FARM NO. 724, PORTION 7 OF THE FARM NO. 942, REMAINING EXTENT OF THE FARM NO. 474, PORTION 3 OF THE FARM NO. 474 AND PORTION 4 OF THE FARM NO. 474, FISANTEKRAAL, DURBANVILLE *Letter received via email dated 26 August 2024:* COMMENT ON THE DRAFT SCOPING REPORT ("SR"), PLAN OF STUDY ("POS") AND THE ADDITIONAL INFORMATION SUBMITTED IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) ("NEMA") AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED) FOR THE PROPOSED EXPANSION OF THE CAPE WINELANDS AIRPORT ON PORTION 10 OF THE FARM NO. 724, REMAINING EXTENT OF THE FARM NO. 724, PORTION 23 OF THE FARM NO. 724, PORTION 7 OF THE FARM NO. 942, REMAINING EXTENT OF THE FARM NO. 474, PORTION 3 OF THE FARM NO. 474 AND PORTION 4 OF THE FARM NO. 474, FISANTEKRAAL, DURBANVILLE 1. The draft SR and PoS (dated 22 July 2024) and the supporting documentation, received by this Directorate via electronic mail correspondence on 23 July 2024, and this Directorate's correspondence acknowledging receipt thereof (dated 2 August 2024), refer. 2. Having considered the information contained in the aforementioned documents, this Directorate provides the following comments with regard to the proposed development: 2.1. Offset Requirements 2.1.1. Please be reminded the requirements relating to the proposed biodiversity offset, as per this Directorate's previous correspondence dated 14 December 2023 must be met. It is recommended that these requirements be met prior to the submission of the draft EIA Report so that all Interested and Affected Parties ("I&APs") as well as commenting authorities have access to such information during a minimum commenting period of thirty (30) days. 2.1.2. The Freshwater Ecology Report (dated February 2024) states that a freshwater offset may need to be considered for the 6.74ha loss of	Thank you, we will revert in the event of any questions or points of clarity required. Regards; Deon Cloete *Response to letter:* 1. Noted 2. 2.1. 2.1.1. Noted. A Terrestrial offset report forms part of the proposed project and will be available for comment during the IA Phase to all registered I&APs. 2.1.2. The requirement is noted. The Freshwater offset forms part of the WULA requirements and is at present in consultation with DWS. Comments will be included as they become available.

		freshwater habitat. Please ensure that confirmation regarding the freshwater offset is obtained from the National Department of Water and Sanitation ("DWS"). Comments from the National DWS must be included in all future reports. 2.2. Specialist Studies and Reporting 2.2.1. Please ensure that all applicable specialist studies and input are included in the draft EIA Report to ensure that all I&APs, including commenting authorities, have access to all information during the minimum commenting period of thirty (30) days. 2.2.2. Please be reminded that in terms of the "Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation" ("the Protocols") certain inputs are required from relevant authorities. In this instance, for example, a Civil Aviation Compliance Statement requires comment from the South African Civil Aviation Authority ("SACAA"). You are therefore reminded that a full compliance statement will only be considered 'complete' when all of the requirements, as per the relevant Protocol, are provided. Hence, please ensure that comments from all relevant authorities, such as the SACAA, are provided.	2.2. 2.2.1. Noted and will be complied with 2.2.2. CWA response: Preliminary comments from SACAA form part of the Scoping Phase PPP, but further consultation is ongoing through focus group meeting with SACAA. Thank you for your reminder regarding the requirements under the "Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998." We acknowledge the importance of obtaining the necessary inputs from relevant authorities, including the South African Civil Aviation Authority (SACAA), to ensure that the Civil Aviation Compliance Statement is deemed complete. In accordance with the Protocols, we are actively engaged in fulfilling these requirements. As noted in our process, we are in the final stages of compiling the necessary documentation to support the compliance statement. This includes securing letters of support from the City of Cape Town and the Western Cape Province, as well as providing comprehensive synopses on the Environmental Impact Assessment (EIA) process and the Airspace Concept of Operations (ConOps) within the NASCOM ATM/CNS process Furthermore, focus groups with affected stakeholders are currently underway to ensure that all concerns and inputs are

			fully considered in the final submission. These engagements are crucial in shaping the final design and ensuring stakeholder buy-in. Please rest assured that comments from SACAA will be included in the final submission. We have planned a preliminary engagement with SACAA to ensure that all requirements are met and to pre-emptively address any concerns. Once the necessary supporting documents are collated, a full submission will be made to SACAA to obtain their official comment and finalize the Compliance Statement. We appreciate your guidance and will ensure that the compliance requirements are fully satisfied in line with the relevant Protocols.
		2.2.3. Based on the electronic mail correspondence from Ms. Amanda Fritz-Whyte of PHS Consulting received by this Directorate via electronic mail correspondence on 8 August 2024, it is this Directorate's understanding that the following specialist inputs are not full specialist studies: 2.2.3.1. Geotechnical Report; 2.2.3.2. Freshwater Offset Study; 2.2.3.3. Glint and Glare Study; 2.2.3.4. Major Hazardous Installation Risk Assessment; and 2.2.3.5. Terrestrial Biodiversity Offset Study.	2.2.3. Noted
		2.2.4. In light of the above, the Protocol nor Appendix 6 of the EIA Regulations, 2014 (as amended) requirements are applicable. You are, however, reminded that should the above reports at any stage be upgraded to full specialist studies, then this Directorate must be duly informed and the said studies must be further updated to meet the relevant Protocol or Appendix 6 of the EIA Regulations, 2014 (as amended) requirements. 2	2.2.4. Noted

		2.2.5. The need to update any specialist input/reports to full specialist studies must be scoped out and the relevant motivation included in the final SR.	2.2.5. Noted
		2.2.6. According to the Groundwater Impact Assessment Report (dated 8 March 2024), the vulnerability of groundwater impacts has been found to increase to the north-east where the Colenso Fault System is located and therefore should be considered as a sensitive area in terms of groundwater. All 'no-go' areas must be spatially illustrated, as part of the spatial development plan to be submitted with all future reports. Furthermore, measures to avoid, or if not possible mitigate, negatively impacting the sensitive area, as stipulated in the Groundwater Impact Assessment Report, must be confirmed.	2.2.6. Noted and will be complied with. The Biophysical constraints item 12 in Appendix 26 SDP has been updated to include the geohydrological no-go area. This will also be included in future reports. The Colenso fault is already described and shown in section in the Scoping report.
		2.2.7. It is stated in the Freshwater Ecology Report (dated February 2024), that a 10m conservation buffer in accordance with the City of Cape Town's Floodplain and River Corridor Management Policy (2009), should be considered as a 'no-go' area. This 'no-go' area must be spatially illustrated.	2.2.7. Noted and will be complied with
		2.2.8. Should it not be possible to avoid any sensitive areas, as required by the specialists/or the Environmental Assessment Practitioner alike, detailed motivation must be provided.	2.2.8. Noted
		2.2.9. This Directorate notes that a groundwater monitoring network will be required. It is therefore requested that a groundwater monitoring plan, which incorporates the required groundwater monitoring network be included in the draft EIA Report.	2.2.9. Noted
		2.2.10. It is this Directorate's understanding that the various scoping/baseline reports that were submitted with the draft SR will be further expanded on during the EIA phase. Hence, you are reminded that for all full specialist studies, the requirements of the relevant Protocol or Appendix 6 of the EIA Regulations, 2014 (as amended) requirements must be met.	2.2.10. Noted and will be complied with
		2.2.11. Since large scale Search and Rescue was detailed in the Botanical Scoping Report (dated 22 February 2024) as well as the Botanical Baseline Report (dated 17 August 2020), please ensure that the	2.2.11. Detail on the manner in which the Search and Rescue will take place, the time periods when the Search and Rescue will take place, and the parties required for the implementation

		botanical study(s), which will follow these studies addresses, inter alia, the manner in which the Search and Rescue will take place, the time periods when the Search and Rescue will take place, and the parties required for the implementation thereof.	thereof will be included in the Botanical Impact Assessment report.
		2.2.12. According to the Agricultural Agro-Ecosystem Assessment Report (dated 15 February 2024), the impact of the loss of 206ha high potential productive land is rated to be of high significance for which mitigation is necessary. The said Assessment Report further contains baseline mitigation measures reflected on page 26 to 27. It is therefore requested that these mitigation measures be further elaborated on, as follows:	2.2.12. Noted and will be included in Impact Assessment report
		2.2.12.1. The specific actions to limit and restrict the loss or degradation of soil suitable run-off and soil erosion control measures and infrastructure; and	
		2.2.12.2. The specific means on how the release of run-off water into existing streams should be controlled.	
		2.2.12.3. In relation to the above, it is hereby particularly requested that specialists or professionals who are contributing towards the assessment of the associated impacts provide/confirm detailed and practical/implementable mitigation measures that must be implemented, as part of the proposed development.	
		2.3. Associated Applications	2.3.
		2.3.1. As per this Directorate's previous correspondence (dated 2 August 2024), please ensure that proof of the submission and progress regarding your application in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA")) is included in all future reports relevant to your application.	2.3.1. Noted and will be included
		2.3.2. It is this Directorate's understanding that other applications such as, inter alia, Norm & Standards Registrations are also applicable. Hence, given the nature and scale of your proposal, it is recommended (unless otherwise stated by this Directorate) that the relevant applicable applications run parallel with your Scoping and	2.3.2. Noted and will be included

		EIA applications as far as possible and proof thereof as well as responses from the Competent Authorities be included in all future reports regarding your application.	
		2.3.3. It is understood that a mine closure application has been lodged with the Competent Authority for Portion 23 of the Farm No. 724, Fisantekraal and a Portion of the Remainder of the Farm No. 474, Fisantekraal. It is therefore similarly requested that proof of the said application and the progress to date is provided together with all future reports, as the said properties forms part of the site for the proposed airport expansion. It is further recommended that concluding of the mine closure application be prioritised as far as possible, as the outcome thereof might have a bearing on your Scoping and EIA application (e.g. rehabilitation of the site as required by the Competent Authority in terms of the mine closure application). Further please ensure that you confirm what the intentions are for these portions of the site, so that such information can be included/captured in the decision pending your Scoping and EIA application.	2.3.3. The mine closure application has been lodged with DMRE and a site audit concluded. The application is currently in public participation phase. The proposed closure plan has been structured to align with the anticipated development of the Cape Winelands Airport and the engineering design specifications provided by the CWA for the future use of the quarry.
		2.4. Strategic Context 2.4.1. It is noted that Section 4.1. of the draft SR lists the various legislation and policies applicable to the proposed development. It is hereby requested that the following information is provided : 2.4.1.1. How the proposed development is consistent, or not, with the applicable legislation and policies; and 2.4.1.2. In cases where the proposed development is not consistent with the with the applicable legislation and policies, provide reasons why such inconsistencies/deviations for the legislation/policies must be deemed permissible (this may be applicable to the relevant forward planning policies and frameworks).	2.4. 2.4.1. 2.4.1.1. Noted and will be included 2.4.1.2. Noted and will be complied with
		2.5. Servicing Requirements	2.5.

		2.5.1. Given the nature and scale of your proposal, it is requested that confirmation letters regarding your service requirements be obtained as soon as possible and be included in all future reports. 2.5.2. Whilst various energy options are considered, as part of the draft SR, please ensure that the final SR confirms the selected energy service requirements of the proposed development, as this information must be carried over into the EIA phase and the impacts thereof assessed during this phase of the application process. 2.5.3. Please be reminded that the decision pending your application will consider the confirmed service requirements that will form part of the development. Hence it remains imperative that future reports contain information on the definitive components of your development proposal. This information will be captured in the description of your development proposal in the pending decision on your Scoping and EIA application. 2.5.4. Further, to the above, it is recommended that all efforts as far as possible be made to select the alternatives regarding your services requirements that will have the least negative environmental impact, e.g., the use of green/renewable energy sources. 2.5.5. It is confirmed in the draft SR that conveyance infrastructure must be implemented outside of the site boundary to convey the flows to the municipal Wastewater Treatment Works at Fisantekraal. Please note that for all non-linear infrastructure, or any other components of the proposed development, which are proposed outside the site, written consent of the landowner or person in control of the land to undertake such activity on that land, must be provided. Should this be the case, then written consent must be provided to this Directorate as soon as possible as well as be included in all future reports. 2.6. Public Participation Process ("PPP") 2.6.1. Table 55 in the draft SR provides information on the issues raised by I&APs during Pre-application Scoping Phase, including inter alia, noise, traffic, air quality and biodiversity related impacts. It is this	2.5.1. Noted and will be complied with 2.5.2. Noted 2.5.3. Noted 2.5.4. Noted 2.5.5. Noted 2.6. 2.6.1. Noted

		Directorate's understanding that these and all other issues raised will be assessed as part of the pending EIA phase. Proof thereof must therefore be included in the draft and final EIA phase. Additionally, please ensure that all of such issues are scoped out in the final SR, which is to be submitted to this Directorate for consideration. 2.6.2. Please be reminded to provide all proof of the PPP conducted to date and in terms of Chapter 6 of the EIA Regulations, 2014 (as amended). 2.7. Content Requirements 2.7.1. Please ensure that final SR and Plan of Study meet all of the content requirements in terms of Appendix 2 of the EIA Regulations, 2014 (as amended). 2.7.2. With respect to the above, please note that the final SR must include the following requirements in terms of Appendix 2 of the EIA Regulations, 2014 (as amended) which are currently not included in the draft SR: 2.7.2.1. Section 1 (g) a full description of the process followed to reach the proposed preferred activity, site and location of the development footprint within the site, including— 2.7.2.1.1. (viii) the possible mitigation measures that could be applied and level of residual risk; 2.7.2.1.2. (ix) the outcome of the site selection matrix; 2.7.2.1.3. (xi) a concluding statement indicating the preferred alternatives, including preferred location of the activity; and 2.7.2.1.4. (ix) the outcome of the site selection matrix. 2.7.2.2. Section 1 (k) where applicable, any specific information required by the competent authority. 3. General	2.6.2. Noted – will be provided 2.7. 2.7.1. Noted and will be complied with 2.7.2. 2.7.2.1. Noted 2.7.2.2. Noted 3.

		3.1. In accordance with Regulation 21(1) of the NEMA and EIA Regulations, 2014 (as amended), the final SR must be submitted within 44 days of receipt of the application by this Directorate, calculated from 23 July 2024. 3.2. Furthermore, please note that in terms of Regulation 45 of the NEMA and EIA Regulations, 2014 (as amended), an application in terms of the NEMA and EIA Regulations, 2014 (as amended) lapses and the Competent Authority will deem the application, as having lapsed, if the applicant fails to meet any of the timeframes prescribed in terms of these Regulations, unless extension has been granted in terms of Regulation 3(7). 4. Kindly quote the abovementioned reference number in any future correspondence in respect of the application. 5. It is prohibited in terms of the NEMA for a person to commence with a Listed Activity unless the Competent Authority has granted an Environmental Authorisation for the undertaking of the activity. Failure to comply with the requirements of the NEMA will result in the matter being referred to the Department's Directorate: Environmental Law Enforcement for possible prosecution. A person convicted of an offence in terms of the above is liable for a fine not exceeding R10 000 000 or to imprisonment for a period not exceeding 10 years, or to both such fine and imprisonment. 6. This Directorate reserves the right to revise or withdraw its comments and request further information from you based on any information received. Your interest in the future of the environment is greatly appreciated.	3.1. Final submission will be on 6 September 2024 3.2. Noted 4. Will be complied with 5. Noted 6. Noted
243	Marius and Christine van Veggelen	*Email dated 26 August 2024:* 1. I am against this plan. Do we honestly need another airport? We already struggle with trucks not adhering to our weight limitations, this airport will make it worse. Not to mention the noise. This is just a bad idea, end of story.	*Email response provided 26 August 2024:* 1. Thank you for the email. The contents thereof is noted.

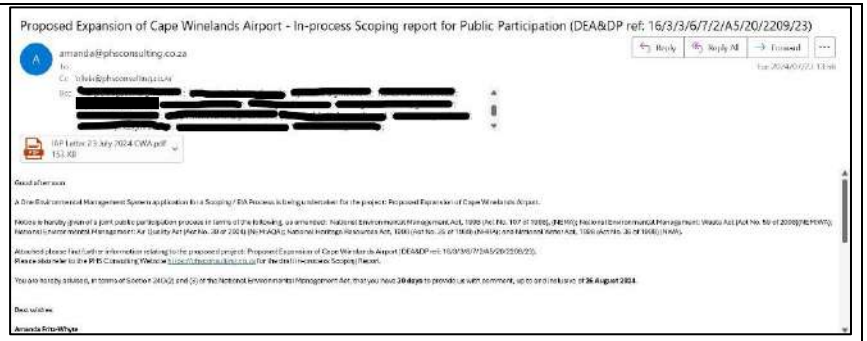
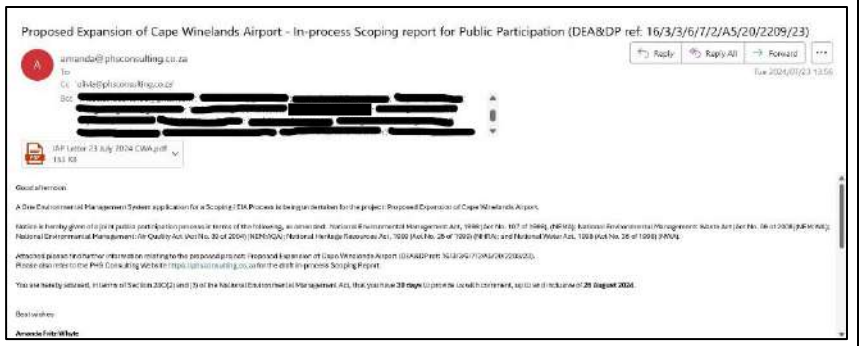
244	Thys Pienaar	*Email dated 26 August 2024:* 1. Please find attached comments regarding the Proposed Expansion of the Cape Winelands Airport. *Letter received via email dated 26 August 2024 (please also refer to comment 224):* 1. I would like to comment and be added as a I&AP. 2. My general concerns regarding the above expansion like all others are noise, pollution, congestion and crime. I hope that they will be answered by questions other have asked 3. My specific concerns are that PHS consulting and developers are really trying to tiptoe or not to mention the impact the proposed expansion will have on MIKPUNT. My late participation in the whole airports matter, is that I have only now realised how near to MIKPUNT this expansion will come. I do know where the current Fisantekraal airport (plot) is and have no problem with any activities or expansions taking place there. I do however have a huge problem and concern with the proposed runway extension and additional plots of land acquired to do this. For all developers and professionals involved in this project it should be an absolute no brainer that areas, that will be most affected especially with noise and air quality will be those closest to the end of runways. I'm not a professional but rude measurement and calculation based on your pictures and drawings (which always just ends before MIKPUNT) put MIKPUNT in a direct line with the new proposed runway. The end of runway and nearest residence to my calculations are roughly 2000-2500meter apart. This alignment also put us directly downwind of the airport on prevailing wind directions. Summarised this means that jets will pass directly over MIKPUNT at a very low altitude (120m at on a 3-degree glide slope 2000m from end off runway. It also means that all noise and air pollution from ALL the activities will be carried directly to us on the prevailing wind.	*Email response provided 26 August 2024:* 1. Thank you for the email. The contents thereof is noted. EAP Response to letter: 1. You have been registered as an I&AP for the proposed project. 2. The concerns are noted. The EIA process includes the assessment of a Noise Impact Assessment, Air Quality Impact Assessment, Traffic Impact Assessment and Socio- economic Impact assessment, which will be circulated to all registered I&APs during the Impact Assessment commenting period. 3. The concerns are noted. Impacts associated with the proposed project will be determined and assessed during the Impact Assessment Phase and circulated to all registered I&APs during the Impact Assessment commenting period.

		4. From the above I need to ask you the following: 4.1. Have PHS consulting, the developers and all contracted professionals contracted to do all feasibility and environmental studies have realised/or have been briefed, that off all affected areas MIKPUNT will probably be affected the most. 4.2. Can PHS please confirm on a detailed map with verified distance between end of runway and residences of MIKPUNT and how this compares to the international norm	4. 4.1. Impacts associated with the proposed project will be determined and assessed during the Impact Assessment Phase and circulated to all registered I&APs during the Impact Assessment commenting period. 4.2. The comment is noted. CWA Response: See image below: The distance between the northern runway end and Mikpunt is approximately 2.66km. Mikpunt is also not in the direct approach of the proposed runway, but rather at approximately 23 degrees west of the proposed runway approach.

			International examples of distance between nearest residence and runway end (approximately): • Cape Town Intl Airport Rwy 01 – 799m • OR Tambo Rwy 21L – 355m • OR Tambo Rwy 21R – 449m • London Heathrow Rwy 27L – 482m • New York JFK Rwy 22L – 1.07km Mikpunt is substantially further away from the proposed CWA runway than compared to the above (international norm). It must also be noted that the list of above airports are substantially larger and busier than the proposed CWA, expected to process up to 20x more traffic than CWA in the case of Heathrow.
		4.3. Can PHS please confirm the flight path in relation to MIKPUNT from aircraft either landing or taking off. This must include height above ground and distance to nearest residence	4.3. CWA response: See image above which is an approximation. Neither flight paths nor approach/takeoff slopes have been finalised yet. Assuming a 3-degree glide slope for landings, and assuming that an aircraft will land 200m into the runway, it implies that an aircraft would be 140m above the runway height. Note however, that the runway itself is approximately 32m elevated relative to Mikpunt and thus the aircraft at the point in question would be 172m above the nearest residence. Regarding noise, the resultant impacts are being assessed and will be included in the Environmental Impact Reports
		4.4. Can PHS please motivate why a public meeting in MIKPUNT have not been organised based on the assumption/fact that this will be the most affected area.	4.4. EAP Response: A public meeting was held at the most central community facility with capacity to host a large crowd in the area. The Fisantekraal Community Hall is accessible to Mikpunt residents who we do understand was present at the 8 May Public Meeting.

			We are about to enter into the impact phase. During this phase all impacts will be considered and will provide a clear indication of the extent of which communities are and not impacted. It is too early to offer any indication of the extent to which Mikpunt is affected. There are plans for an open public day in November this year, at a venue accessible to Mikpunt residents, where impacts can be further discussed. As a registered I&AP you will receive notice thereof.
		4.5. Based on the noise report on your website the MIKPUNT readings were the lowest of all sites. Can PHS please supply us with the following. 4.5.1. The calculated change in DB readings expected when airport is in full operation. This can be based on readings taken from LANSERIA from same distance and directly inline with runway from end (point 2) 4.5.2. Will this db. reading still fall in the rural residential bracket as per your report. 4.5.3. Can your professional report do a study or at least mention the effect prevailing winds have on noise pollution and how this will enhance the noise pollution effect on MIKPUNT	4.5. 4.5.1. The Noise Impact assessment with associated Noise Cones will be available to all registered I&APs during the Impact Assessment Phase of the proposed project. 4.5.2. The Noise Impact assessment with associated Noise Cones will be available to all registered I&APs during the Impact Assessment Phase of the proposed project. 4.5.3. The comment is noted
		4.6. The air pollution report is very vague. Can PHS do a specific report relating to the air pollution effect it will have on a residence area 2000m, directly inline and downwind of a regional airport as planned.	4.6. The Baseline Air Quality report is done by an independent specialist company DDA Engineering.
		4.7. Airplane accidents are more prone to happen during or directly after landing or take off. With MIKPUNT being directly inline and 2000m front end off runway we are in direct danger from this. I do not see this point being mentioned at all.	4.7. This comment is noted. CWA response: The concern about bird strikes above Mikpunt is noted. However, Mikpunt is in fact not in the direct approach path of the proposed runway and thus the risk of bird strikes at or above Mikpunt is extremely unlikely.
		4.8. What alternates have the developers and PHS looked at to minimise the nearness and the direct inline problem MIKPUNT pose to the development. Can the runway angle be altered slightly to miss MIKPUNT. Can the runway be moved over the Fisantekraal road more towards the	4.8. The comment is noted. The placement and orientation of the runway is through detailed design and incorporates various parameters such as temperature, wind direction, topography, required airspace integration, transport infrastructure and airspace exclusion zones.

		NI side to even out the distance and affect to acceptable level for both sides. 4.9. Property values will in general rise with development, but in MIKPUNT's case it might very easily decline. People want to live near the airport but not touching distance from the runway. What guarantees can the developers give MIKPUNT property owners that they will not loose value. Are there steps in place should this happen. 5. Summarised. Most residents including myself, have invested in property in MIKPUNT due to the rural and tranquil lifestyle it offers. Must of us is under no illusion that the city and development will catch up with us due time. I am a frequent flier and would appreciate the convenience it brings. I'm very willing to concede to some added noise, traffic, pollution, crime etch coming with any development. However, I'm NOT willing to go from rural tranquil life to living directly under and very near to and international airport runway. This will not slightly or moderately affect our way of living; it will drastically and completely change it from rural and tranquil to living in the most undesired spot in any city imaginable. 6. I'm opposed to the Airport development due to the reasons and facts above. I'm open to be convinced otherwise with facts and guarantees. I await your prompt response to my questions.	CWA is an existing operational and licensed airport that has been in existence for 80 years, operating at the current site. 4.9. CWA Response: The concern regarding property values is noted this is considered as part of the Socio-Economic IA. Per previous comments, it appears that Mikpunt is substantially further away from the runway than occurs at other airports around the world. 5. The comment is noted. 6. The comment is noted.
245	Marijke van Veggelen	*Email dated 26 August 2024:* 1. I am sending this from my father's email account even though I am listed as an affected party, I never received an email about this. Needless to say I am fully against this development. The noise, the traffic, and everything else that will go along with this... Just no.	*Email response provided 26 August 2024:* 1. Thank you for the email. The contents is noted. You were notified of the commenting period for the in-process Scoping report on 23 July 2024 by email – please see attached.

			 Proposed Expansion of Cape Winelands Airport - In-process Scoping report for Public Participation (DEA&DP ref: 16/3/3/6/7/2/A5/20/2209/23) Reply Reply All Forward amanda@phsconsulting.co.za IAP Letter 23 July 2024 CWA.pdf 153 KB Good afternoon A One Environmental Management System application for a Scoping / EIA Process is being undertaken for the project: Proposed Expansion of Cape Winelands Airport. Notice is hereby given of a joint public participation process in terms of the following, as amended: National Environmental Management Act, 1998 (Act No. 107 of 1998), (NEMA); National Environmental Management: Waste Act (Act No. 59 of 2008)(NEM:WA); National Environmental Management: Air Quality Act (Act No. 39 of 2004) (NEM:AQA); National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA); and National Water Act, 1998 (Act No. 36 of 1998) (NWA). Attached please find further information relating to the proposed project: Proposed Expansion of Cape Winelands Airport (DEA&DP ref: 16/3/3/6/7/2/A5/20/2209/23). Please also refer to the PHS Consulting Website https://phsconsulting.co.za for the draft In-process Scoping Report. You are hereby advised, in terms of Section 23(2) and (3) of the National Environmental Management Act, that you have 30 days to provide us with comment, up to and inclusive of 26 August 2024. Best wishes Amanda Fritz-Whyte *Email dated 28 August 2024:* 2. Apologies for indicating the wrong email address [redacted] in the proof of communication sent. Please see attached the correct email address indicated ([redacted]) on notification email of 23 July 2024.  Proposed Expansion of Cape Winelands Airport - In-process Scoping report for Public Participation (DEA&DP ref: 16/3/3/6/7/2/A5/20/2209/23) Reply Reply All Forward amanda@phsconsulting.co.za IAP Letter 23 July 2024 CWA.pdf 153 KB Good afternoon A One Environmental Management System application for a Scoping / EIA Process is being undertaken for the project: Proposed Expansion of Cape Winelands Airport. Notice is hereby given of a joint public participation process in terms of the following, as amended: National Environmental Management Act, 1998 (Act No. 107 of 1998), (NEMA); National Environmental Management: Waste Act (Act No. 59 of 2008)(NEM:WA); National Environmental Management: Air Quality Act (Act No. 39 of 2004) (NEM:AQA); National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA); and National Water Act, 1998 (Act No. 36 of 1998) (NWA). Attached please find further information relating to the proposed project: Proposed Expansion of Cape Winelands Airport (DEA&DP ref: 16/3/3/6/7/2/A5/20/2209/23). Please also refer to the PHS Consulting Website https://phsconsulting.co.za for the draft In-process Scoping Report. You are hereby advised, in terms of Section 23(2) and (3) of the National Environmental Management Act, that you have 30 days to provide us with comment, up to and inclusive of 26 August 2024. Best wishes Amanda Fritz-Whyte

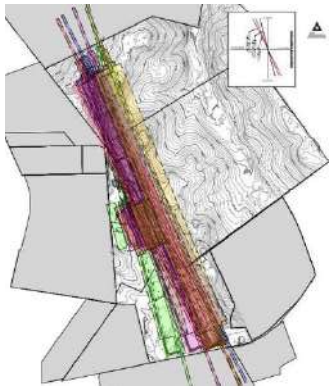
Late Comments from In-Process Scoping Phase (Comments revied after 26 August2024)			
246	Clarissa Fransman – **CoCT Spatial Planning and Environment Directorate**	*Email dated 29 August 2024:* Please find attached City of Cape Town collated comment on the DSR for the proposed CWA expansion. *Letter received via email dated 29 August 2024:* PORTION 10 OF PAARL FARM 724, REMAINDER OF PAARL FARM 724, PORTION 23 OF PAARL FARM 724, PORTION 7 OF PAARL FARM 942, REMAINDER OF PAARL FARM 474, PORTION 3 OF PAARL FARM 474 AND PORTION 4 OF PAARL FARM 474, FISANTEKRAAL: DRAFT SCOPING REPORT - PROPOSED EXPANSION OF CAPE WINELANDS AIRPORT (CWA) - DEA&DP Ref No: 16/3/3/6/7/2/A5/20/2209/23. The City of Cape Town has delegated certain powers to the Executive Director and Director, Spatial Planning & Environment, to make comments, objections and representation in a basic assessment, full scoping or other environmental impact assessment processes, and on an advertised report or submission, including applications for exemption from any provision of the National Environmental Management Act or specific Environmental Management Act. The collated comment below are given in terms of these delegations (dated 20 June 2023 and 25 July 2024 and sub-delegations of 09 August 2024). Your email correspondence, dated 23 July 2024, the accompanying Notification letter dated 17 July 2024 and the Draft Scoping Report (dated July 2024), pertaining to the proposed expansion of the existing Cape Winelands Airport (CWA) on Portion 10 of Paarl Farm 724, Remainder of Paarl Farm 724, Portion 23 of Paarl Farm 724, Portion 7 of Paarl Farm 942, Remainder of Paarl Farm 474, Portion 3 of Paarl Farm 474 and Portion 4 of Paarl Farm 474, Fisantekraal, refer. It is recorded that the City of Cape Town (the City) provided comment on the Pre-Application Scoping Report, dated 18 January 2024. The following technical comment is provided by the relevant City of Cape Town Departments based on the information provided in the Draft Scoping Report (DSR): 1. **Spatial Planning and Environment: Urban Planning and Design Department**	*Email response provided 29 August 2024:* We acknowledge receipt of your comments. The delegation of certain powers is noted. Noted.

		1.1. The Urban Planning and Design Department (UPD) has indicated that its previous comments remain applicable and the comments below are provided in addition. 1.2. The comment is provided in line with the Department's operating model to provide policy guidance to private and public sector developers with regard to developments to ensure alignment with the spatial development objectives of the City. The 2023 Council approved Metropolitan Spatial Development Framework (MSDF) and the Northern District Plan provide the basis in this regard. As such, the following comment is provided from a spatial perspective, considering the impact and desirability of the proposed expansion of the CWA in relation to its location with surrounding land uses and should be read together with the comments from of other technical City departments. Phased development of the proposed expansion of the CWA 1.3. Notwithstanding the phases reflected on the site development plan (SDP) and linear layout (one phase being the landside precinct and the services precinct; and another phase being the general aviation precinct. The airside precinct spans across both phases), a phased development approach of the proposed CWA expansion is required. 1.3.1. The proposed phasing however does not provide detail in terms of timeframes, nor does it provide a link with various applications and authorisations that will be undertaken. As such, it presents a gap in the information and must be provided during the forthcoming report.	**1. Spatial Planning and Environment: Urban Planning and Design Department** 1.1. Noted. 1.2. Noted. 1.3. There seems to be a misunderstanding, with the precincts being conflated with the phases. The applications pertain only to two phases: the initial phase 1 and the final end stage phase 2. The precincts, which are interrelated and functionally integrated, will be developed simultaneously across both phases. In the first phase, certain essential components, such as the 3,500-meter runway, must be established, while other elements, like General Aviation hangars or cold storage facilities, will be developed based on demand or growth in perishable freight. Apart from the agricultural precinct, which constitutes the majority of the site, all other precincts span both phases. 1.3.1. The first phase 1 is to start immediately upon all authorisations being in place. The second phase 2 will be triggered by growth in passenger numbers being at 1.7 million passengers per year. NACO projected that this is likely to occur by 2029. Full and final development will be reach when the passenger number reach 5.2 million passengers per annum.

		1.3.2. The phased development approach is to be declared and considered in all the specialist studies, especially the noise and engineering infrastructure network demand planning to prevent the under representation of the potential impact of the development on noise, infrastructure networks and surrounding land uses.	The various land use applications that will be made on completion of the Final Environmental Impact Assessment Report include: • Application in terms of section 53 of the Provincial Land-Use Planning Act. • A composite application in terms of the MPBL for: o the City to determine whether site specific circumstances exist justify the deviation from the MSDF and following the public participation process prescribed in section 9 of the MPBL; o the rezoning to Transport Zoning TR1 with consent for an "airport" and other subordinate uses such as hotel, conference facility, business premises and a service station; o the consolidation of some of the farm portions and/or registration of reciprocal servitudes for internal services; o the amendment of existing conditions of approval for the current airport to align with the above. • Application in terms of section 4 of the CoCT Immovable Property By-law for the closure of the "*cul-de-sac*" section Minor Road OP 6/8 (Buurmanskraal Road) from the western to the eastern boundary of the Remainder of Farm 724 Joostenbergs Vlakte. 1.3.2. CWA Response: CWA acknowledges the importance of ensuring that all specialist studies, including those related to noise and engineering infrastructure network demand planning, fully consider the cumulative impacts of the entire development. The phased strategy has been declared and communicated to all specialists, with a commitment to assessing each phase in the context of the overall project. NACO (Netherland Airports Consultants) has structured the phasing of aviation infrastructure to align with planning activity levels, typically set 5 years apart, and the subsequent specialists' studies are based on these clearly defined phases.

			CWA is closely with its specialists to refine methodologies as the project progresses, ensuring comprehensive assessments that prevent underrepresentation of potential impacts on noise, infrastructure, and surrounding land uses. Mitigation measures will be implemented and adjusted as needed to address cumulative impacts, ensuring compliance with regulatory requirements and minimizing environmental impact.
		1.4. The intended development phases, and the growth in gross leasable area per land use category, are not available and therefore the noise contours and phased impact on engineering networks are not available.	1.4. Noise contours will only become available during the impact assessment phase of the proposed project. The noise study and noise contours will reflect the full potential as per current rights, the first year of operating the 3.5km runway and the ultimate phase and maximum impact i.e. 5.2 million passengers per annum, this on the basis of industry best practice assessment methodology used by the noise specialists. The noise impact contours will also be prior to adopting recognised and acceptable industry noise mitigation measures. CWA response: CWA acknowledges COCT's concerns regarding the lack of information on the intended development phases, gross leasable area (GLA) per land use category, and the phased impact on engineering networks. Please be informed that detailed information on the GLA per land use category, along with a comprehensive breakdown across different phases of the development, will be provided in the next round of documentation. Additionally, the phased impact on engineering networks, including necessary analyses and projections, will also be detailed to ensure that infrastructure planning is well-coordinated with the project's phased growth. CWA is committed to delivering these documents to facilitate informed decision-making and to ensure that the proposed development aligns with regulatory requirements and industry best practices.
		1.5. Only two development alternatives are proposed; namely the proposed alternative (end state) and the no-go alternative. It is a legal requirement in terms of Section 24O(1)(b)(iv) of National Environmental Management Act to evaluate other alternatives. The evaluation of different alternatives will aid in assessing the growing impact of the development proposal from its current to its full development state.	1.5. CWA response: CWA followed a systematic approach with regards to runway alternatives which included the following: Step 1: Assess the optimal runway orientation based on prevailing wind conditions to ensure safe operations. Here CWA had to consider: a) Safe operations

			b) Efficient operations c) International standards and recommendations d) Runway orientation (prevailing wind conditions) e) Wind coverage f) All-weather wind conditions g) Runway designation Step 2: Assess the integration into the Air Traffic Management System. Here CWA had to consider: - Existing controlled airspace in the Western Cape - Existing traffic flow patterns in the Cape Town Terminal Airspace - Weather - Topography - Exclusion zones i.e. Koeberg Nuclear Power Station - Air Traffic - Alignment of traffic patterns for proposed runway with existing traffic flow patterns Step 3: Determine the optimal position of the runway/s on site. Here CWA had to consider: • Site constraints • Operational efficiency and safety • Cost of development (cost to industry) • Commercial development potential Once the runway orientation was determined, positioning on site had to be analysed. The runway could not be shifted further west, due to the physical constraints on site, such as the quarry and topography of the site. The runway could not be shifted further east because of landownership boundary constraints. The runway had to maintain an orientation of 01-19 to allow for parallel airspace operations with Cape Town International Airport. Only slight permutations of runway orientations were considered when the on-site analysis was performed, as can be seen in the options below. Notwithstanding all of the key considerations articulated in steps 1-3 above, it was crucial to maintain an orientation close to 01-19 from a safety and airspace

			integration perspective as Cape Town International Airport is on this orientation.  When evaluating the establishment of a second airport in Cape Town, such as the proposed Cape Winelands Airport (CWA), it is crucial to assess site-specific circumstances to ensure optimal performance while minimizing environmental and social impacts. Accessibility plays a significant role, with the ideal location being within a 30 to 60-minute drive from the city centre, yet sufficiently distant from densely populated areas to minimize disruptions. The site should be predominantly flat, situated away from nature reserves and mountainous regions to avoid ecological harm and ensure safe flight operations. The selected location should offer ample space to accommodate current operations and future expansion while balancing cost considerations to maintain accessibility and affordability. Strong connectivity to highways, public transportation, and potentially rail networks is essential for easy access. The site must ensure clear airspace and avoid areas prone to natural disasters, such as flood-prone regions. Minimizing social impacts, with the airport's placement aimed at promoting economic development in less developed areas of the region. Compliance with aviation regulations,

			zoning laws, and alignment with Cape Town's long-term urban planning goals are also essential. Considering these factors, the most suitable location for a second airport would be in a peripheral urban area. This location should balance accessibility, space for expansion, and minimal environmental and community impact, supporting local economic growth while ensuring successful integration into the region. CWA argues that its current site, identified as a priority for an airport in 1943 before the development of Cape Town International Airport (CTIA) which was in 1956, meets the criteria for a second airport in the city. However, CWA requires a deviation from the Municipal Spatial Development Framework (MSDF), as some of the runway infrastructure lies outside the urban edge. This deviation is necessary due to the strategic importance and unique site conditions, crucial for developing critical infrastructure, accommodating growth, and implementing innovative strategies aligned with broader economic and social goals, such as regional development and job creation. The deviation will enable CWA to fulfil its role as a key economic driver while addressing environmental and technical considerations. No alternative site has been considered for several reasons. CWA is an existing operational and licensed airport with an 81-year history at its current site. The expansion of CWA is being developed purely on a commercial basis without government funding, adhering to the principles of financial sustainability and viability, in alignment with Policy Statement 15 of the White Paper on Civil Aviation Policy (2017). As an upgrade of an existing airport rather than the development of a new site, it aligns with the preference expressed in the NADP (2015) for upgrading existing airports over developing green-field sites. The land as part of the original airport, belonging to CWA, is already Transport 1 zoned with consent for an airport, and the CWA properties are centrally located with various existing access points from regional roads. Additionally, the properties are in close proximity to and accessible by the railroad network, and they have access to groundwater that can sustain 75% of the water demand.

			The site can also integrate into existing and planned municipal service infrastructure. All of the land earmarked for expansion is already owned by Cape Winelands Airport Ltd or Cape Winelands Aero (Pty) Ltd or companies controlled by it. The potential cost of establishing an airport of the proposed scale at an alternative greenfield site would be excessive, given the current site's availability and operational status, along with sufficient land to accommodate the proposed project. Given its location, CWA is well-positioned to provide a convenient and safe airport option for residents in the Cape Metropole and beyond. Road access to the site is available through various safe routes, and the site does not pose risks associated with squatting and land invasion. Considering topography, required airspace integration, and exclusion zones, such as the Koeberg Nuclear Power Station (KNPS) exclusion zones, no appropriate alternative site is available in the region. No alternative site could be identified that meets all the locational criteria, such as a slope of less than 1% over 4.3 km in the direction of prevailing winds, a site that will not result in air traffic penetrating airspace restrictions over proclaimed nature reserves, a site that is not in a physically built-up area or so close that landings and take-offs will be problematic, a site that falls outside the FACT controlled airspace, and a site that is outside the Koeberg Nuclear Power Station exclusion zones. Ideally, an airport should be located on the urban development edge (UDE) rather than far outside or well inside the UDE. It needs to be close to urban infrastructure but not in built-up areas. It must be accessible to freight and passengers, with a well-established multi-directional road network and proximity to rail. Finally, the preferred site location should leverage an existing airport, which has long been established as a land use in this location. Amalgamating land to accommodate a 3.5km runway presents significant complexities due to the sheer scale of the area required. To ensure proper safety zones and accommodate the necessary infrastructure, one needs to secure contiguous land measuring just

			under 5km in length. This is an extraordinarily challenging task, as it involves negotiating with multiple landowners, navigating various zoning regulations, and addressing potential environmental and community concerns. The process is further complicated by the scarcity of available land that meets the specific topographical and spatial requirements necessary for a runway of this magnitude. Given these constraints, achieving such a land assembly is not only logistically demanding but also nearly impossible, making it a rare and valuable accomplishment when successful. Thus, there is no feasible and reasonable site or location alternative, as this proposed project is for the expansion of an existing airport with existing aviation rights at this site.
		1.6. Although the actual market response is not available, the information (e.g. business plan) providing evidence for financial need and desirability of the proposed development will have to be provided in the forthcoming reports.	1.6. CWA Response: The need and desirability of a second airport in Cape Town can be examined through the lens of its two fundamental components: "need", which primarily refers to time, and "desirability", which pertains to place. Additionally, these concepts can be equated to the wise use of land, questioning what the most sustainable use of the land might be. "Need" asks whether this is the <u>right time</u> for such a development. Given the projected economic growth, increasing passenger and cargo volumes, and the potential capacity limitations of the current airport, the time appears ripe for considering a second airport. This development could pre-emptively address congestion and capacity issues at Cape Town International Airport, ensuring that Cape Town's infrastructure keeps pace with its expanding role as a major global hub. "Desirability" questions whether this is the <u>right place</u> for the proposed land use. A second airport in Cape Town could be strategically located to support regional development goals, ensuring that the economic benefits are distributed more evenly across the province. Additionally, it presents an opportunity to incorporate sustainability into its design and operation, aligning with global trends towards net-zero emissions. However, the desirability of the project also depends on its alignment with long-term

			urban planning goals, including the impact on local communities, environmental concerns, and land-use implications. When considering the "wise use of land", the question shifts to the sustainability of this land use. A second airport must be evaluated not just for its immediate economic and logistical benefits, but also for its long-term environmental impact, its compatibility with surrounding land uses, and its contribution to the overall sustainability of the region. The land chosen for the airport must be the most sustainable option, minimizing environmental degradation and enhancing the region's resilience to future challenges. The current site has been in existence for 81 years, identified as the most suitable site for aviation activity by the Allied Forces many years ago. It's also important to note that almost all medium-sized cities around the world have more than one airport to manage their growing air traffic demands and to provide redundancy. For instance, cities like Milan have Malpensa and Linate airports, while Washington, D.C., operates with both Dulles and Reagan National airports. Similarly, London is served by multiple airports, including Heathrow, Gatwick, and Stansted. Even Windhoek, the capital of Namibia, operates two airports: Hosea Kutako International and Eros Airport. These examples demonstrate that a second airport can significantly enhance a city's connectivity and resilience, contributing to its long-term growth and sustainability. The need and desirability of a second airport in Cape Town are closely intertwined with considerations of time, place, and the sustainable use of land. While the timing seems appropriate given the growth trajectories, the desirability hinges on how well the location and execution of the project integrate into the broader economic, environmental, and social landscape of the region, ensuring that the land is used in the most sustainable way possible. The precedent set by other medium-sized cities, including Windhoek, further supports the strategic advantages of developing a second airport in Cape Town.
		1.6.1. ACSA also indicated in its comment that certain levels, phases of development can be supported in a co-existence relationship between CWA and CTIA, but for ACSA to consider that, the phasing of development and operational intensity in terms of quantums	1.6.1. CWA response: It is important to note that it is not for ACSA to consider this development or merits thereof – ACSA is not a regulator or an approving authority.

			need to be declared/ stipulated and the associated impact per stage/ or option listed with a clear timeframe connected to each stage. Further evaluation is required of how this proposal will impact on the City's planning policies and how that impact will be evaluated.	The Airports Company Act 44 of 1993 is designed to promote fair competition and ensure that other airport developments, such as CWA, can proceed without being unfairly hindered by the dominant market position of ACSA. Therefore, while ACSA's input on operational and logistical aspects is valuable, any objections or concerns raised should align with the broader regulatory and competitive principles outlined in the Act. This ensures that the development of CWA can move forward in a manner that benefits the region and adheres to the principles of fair competition. CWA affirms its commitment to collaborating with ACSA and to working with ACSA and all industry roleplayers for the benefit of the flourishing aviation industry in South Africa. **Part 1: Co-existence between CWA and ACSA (Sustainability)** <u>ACSA</u> It's important to note that ACSA's objections cannot be based on financial reasons due to the regulatory environment in which it operates. As long as ACSA, as a fellow developer and operator of airports, optimises its funding model by investing in assets that are needed (from its own specific demand) it can never be unsustainable. Based on the regulatory model and in keeping with the regulatory framework as outlined in the Airports Company Act 1993, which protects ACSA by granting a commercial return on assets and thus, as long as no unnecessary investments in infrastructure are made, the airports will always be sustainable. This is true for all airports in the ACSA network, including Cape Town International Airport and George Airport. <u>CWA</u> • CWA concluded a comprehensive business strategy and plan which was informed by numerous market intelligence,

			stakeholder inputs, risk analysis and mitigation plans and included amongst plans, a detailed financial plan. • As an outcome of the business strategy, a full market strategy was developed. • In accordance with the business plan, the economic and financial feasibility and viability for CWA indicates that the Cape Winelands Airport is economically viable and financially feasible and demonstrates long-term sustainability. • In addition, the airport would contribute to and significantly enhance environmental sustainability. Bearing the above in mind, there is no reason why CTIA, CWA and ACSA cannot sustainably co-exist. **Part 2: Phasing of the Development** As it relates to phasing, see response to 1.3.1 above. **Part 3: Associated Impacts** Impacts will be assessed as part of the Impact Assessment Phase of the proposed project and will be provided to all registered I&APs during the appropriate commenting period. **Part 4: Impact on the City's planning policies** The City's Spatial Planning policies in relation to the CWA has been set out in detail in the CWA "Spatial Planning and land-use status" scoping report. The MSDF and all other municipal spatial planning fall under Schedule 4B of the Constitution. As a result, the City created its MPBL (Municipal Planning By-law) which prescribes the processes and criteria to assess land-use applications in the context of its spatial policies, amongst others. The City will conduct a detailed evaluation of the land-use applications that will follow the EIA process in the light of the MSDF and every other relevant policy. This is prescribed in section 99(1)(b) and 99(2)(a) and (c) of the MPBL.

		1.7. The potential impact of increasing levels of passengers and cargo flights per phase need to be stipulated and declared, as different (growing) noise contour profile sets for each of the intensifying phases of activities are anticipated.	1.7. A Noise Impact Assessment forms part of the Impact Assessment Phase of the proposed project and will be provided to all registered I&APs during the appropriate commenting period.
		1.7.1. The UPD Department notes your response that a detailed Noise Impact Assessment Study will be undertaken for the construction and operation of the CWA in the forthcoming reports. Currently, this gap may have an adverse impact on surrounding communities if not addressed appropriately. The potential impact of noise on existing rights and approved (but unrealised land use) rights near the proposed CWA expansion needs to be assessed in the forthcoming reports.	1.7.1. A Noise Impact Assessment forms part of the Impact Assessment Phase of the proposed project and will be provided to all registered I&APs during the appropriate commenting period.
		1.7.2. The DSR still does not address clarification of the noise impact on the proposed expansion of the airport as previously requested. The noise baseline does not clarify the phases of growth from the current airport/ landing strip to the future phases of the end state on which this Environmental Impact Assessment (EIA) is based. The interpretation of the increase of noise, the growth of noise contours and the associated effect on the existing surrounding land uses and approved rights, will change over time and have to be clear in the noise contour study.	1.7.2. CWA Response: CWA acknowledges the concerns raised by the Urban Planning and Design Department regarding the absence of a detailed Noise Impact Assessment Study at this stage and the potential implications for surrounding communities, as well as existing and approved land use rights near the proposed expansion. Please be assured that a comprehensive Noise Impact Assessment will be conducted in the forthcoming phase of the EIA. This study will thoroughly evaluate the noise impacts during both construction and operation, incorporating baseline noise surveys, predictive modelling, and focused assessments on the potential impact on existing rights and unrealized land use rights. We are committed to finding appropriate mitigation strategies and ensuring that the project proceeds with minimal disruption to surrounding communities. We will share the findings of the Noise Impact Assessment in the forthcoming reports and remain open to further dialogue to address any additional concerns.
		1.7.3. Each phase of the proposed end state of the ultimate airport development is anticipated to have different intensity and quantums of flights of various combinations, with various flight paths and different operational hours and will therefore have an impact and result in different sets of noise contours associated with	1.7.3. A Noise Impact Assessment forms an integral part of the Impact Assessment Phase of the proposed project and will be made available to all registered Interested and Affected Parties (I&APs) during the designated commenting period.

		each of the development phases (not only the built environment phasing but also the impact of the flight arrivals and departures).	The noise study and noise contours will reflect No Go alternative and the two phases within Preferred Alternative the ultimate phase and maximum impact i.e. 5.2 million passengers per annum, this on the basis of industry best practice assessment methodology used by the noise specialists. The noise impact contours will also be prior to adopting recognised and acceptable industry noise mitigation measures.
		1.7.4. The noise contour specialist report should be a response to the above-referenced (points 1.7.1-1.7.3) to-be-declared phased development stages, which is to highlight the scale and intensity of flight activity, operating hours and the noise impact. Effectively, as example, should there be 4 (four) phases leading to the end state of the ultimate airport development proposal, then 4 (four) X noise contour sets will have to be provided in the impact assessment specialist report.	1.7.4. The noise study and noise contours will reflect the No Go alternative and the two phases in the Preferred Alternative ultimate phase and maximum impact i.e. 5.2 million passengers per annum, this on the basis of industry best practice assessment methodology used by the noise specialists. The noise impact contours will also be prior to adopting recognised and acceptable industry noise mitigation measures.
		1.8. The same clarification on phasing applies for each of the engineering services. Each phase is anticipated to have a different impact on bulk and link infrastructure connections and demand expectations from the municipal network. It cannot be expected that the City will only engage the process at the Municipal Planning By-Law (MPBL) land use application process. Greater clarity is to be included in the forthcoming reports as it will assist to consider if the potential demands and impact of the proposed development can be accommodated at certain future timelines.	1.8. CWA Response: CWA will ensure that the bulk infrastructure requirements for Phase 1 and key periods leading up to the ultimate end state of the proposed development are thoroughly addressed in the Impact Phase of the Environmental Impact Assessment (EIA). These requirements will be detailed in the bulk civil and electrical engineering reports, as well as in the Traffic Impact Assessment (TIA), which will be prepared by the relevant consultants. This next step in the EIA process will provide a comprehensive expansion on the infrastructure needs, ensuring that all necessary details are considered to support the phased development throughout its progression to the final end state and its long-term sustainability.
		1.9. It is evident from the responses in the Comments and Responses Report (Appendix 30 of the DSR) that the Environmental Assessment Practitioner (EAP) is not able to provide some of the details at this stage of the application and that the proposed expansion of the airport is subject to several application and authorisation processes. It is reiterated that with proposed development phases, pointing towards certain increasing intensities on route to ultimate development rights and the actual impact on the surrounding land uses are to be assessed.	1.9. The comment is noted. Impacts will be assessed as part of the impact assessment phase of the EIA, which will include relevant impacts on surrounding land uses.

		Existing and latent land use rights 1.10. There is an under representation of the existing and latent land use rights in the vicinity of the CWA which understate the potential impact of the proposed CWA expansion to the general public and uninformed stakeholders of the process.	1.10. CWA Response: See 1.10.1 below In relation to neighbouring developments, it is important to note that, while the term "latent" refers to something that exists but has not yet manifested or developed, the conditions imposed on both town planning and environmental regulations, combined with the passage of more than 10 years without any action, mean these developments can no longer be regarded as latent but have either formally expired or, if not, should be considered practically lapsed. As such, any rights or authorizations previously granted have either lapsed or are no longer relevant in practice. Significant neighbours and their latent development rights include: **Garden Cities** (to the South) The original conceptual plan submitted by GC over a decade ago for Portion 2 of Erf 4, Greenville Garden City, has remained unchanged and thus is still considered a GC Concept. Currently, CWA holds only a zoning certificate for Erf 4, indicating this erf as zoned for agriculture, a status confirmed by the City of Cape Town's Surveyor General zoning viewer and the agricultural rates and taxes being paid. Although a rezoning for Erf 4 was issued in a letter dated 3 December 2012, it has since lapsed due to the failure to submit a subdivision within the additional 5-year period allowed, totalling 10 years, meaning the land retains its agricultural zoning. CoCT has confirmed the above in a zoning certificate given to CWA.

following purposes:

Property description	ERF 4, GREENVILLE GARDEN CITY
Physical address	LICHTENBURG ROAD, GREENVILLE GARDEN CITY
Applicable Zoning scheme	City of Cape Town Development Management Scheme
Zone	**AGRICULTURAL ZONE (AG)**

Other previously approved use rights (if any)	The rezoning of Erf 4, Greenville Garden City, issued under cover of the enclosed letter dated 3 December 2012, has lapsed. No submission has been made for the subdivision of Erf 4 within the 5 year time period allowed.

Erf 4 Greenville, shown in orange.

Bella Riva (To the West)

Bella Riva Development included the following land in the approval dated 17th of November 2014:

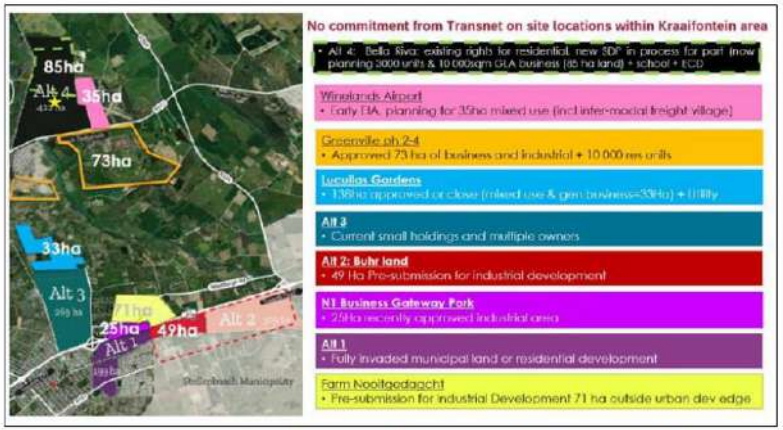
a) Remainder of Cape Farm Lichtenberg 175 *(Shown in Light Blue)*
b) Portion 1 of Cape Farm Lichtenberg 175
c) Remainder Cape Farm 123 *(Shown in Pink)*
d) Remainder Portion 1 of Cape Farm 123 (Lowenhof) *(Shown in White)*
e) Remainder Portion 2 (Portion of Portion1) of Cape Farm 123 *(Shown in Orange)*
f) Cape Farm 1446

Sagewise has been leading the development process for "Bella Riva" under various options to purchase portions of land from the owners previously mentioned. It is important to note that some of these options have expired, and certain properties originally included in the

			development have since been transferred to new owners with different objectives. The areas highlighted in pink, and orange represent the only sections of the previously approved “Bella Riva” development that Sagewise has any control of. The property marked in white was sold to an adjacent farmer and is not available for development. After discussions with the owner of the land indicated in blue, the option to purchase has lapsed, and this land is currently on the market. The original town planning approval dated the 17th of November 2014 is coming up for 10 years since it was approved with no action from the developer. From CWA's perspective, the developer is unlikely to achieve the necessary approvals and infrastructure completion in time to register their rights, primarily due to significant changes in the development plan and associated delays. The decision to omit the golf course and shift focus to lower-cost housing on only one portion of the land marks a substantial deviation from the original vision, likely requiring new environmental and planning approvals, which will prolong the timeline. Moreover, the road and stormwater infrastructure needed for Phase 1, including the East-West Road Link and Lucullus Avenue extension, presents significant challenges that the developer may not be able to meet within the required timeframe. This is compounded by potential delays in securing agreements between the City of Cape Town, Provincial Government, and the developer on road phasing. Furthermore, the reduced scope of the development, focusing solely on lower-cost housing and omitting key amenities like the golf course, undermines the project's original appeal, potentially affecting demand and the viability of the project. Although Bella Riva applied for an extension of validity under S 107 (3)(4) of the Municipal Planning Bylaw, and their zoning rights are in place until 15 July 2025, the substantial changes to the project and infrastructure delays make it unlikely that the development will proceed within the remaining time frame.

		1.10.1. Several approved land use applications are available (latent and not yet visible in the form of physical developments) such as on Bella Riva as well as the Greenville Garden Cities development project. However, the DSR documentation are largely silent on those and hence creates an under representation of the potential impact of the airport expansion. 1.10.2. Similarly, the DSR (from page 105 onwards) refers to the 350 000sqm of non-residential lettable land uses envisaged, but it is unclear how the market will take up these land uses considering the presence of existing commercial and industrial complexes in the northern corridor – more specifically also around 350 000sqm as part of the Greenville Garden Cities development project.	Refer to other developments in the area as shown in comment 1.10.4 1.10.1. CWA Response: The Spatial Planning and land use status report did address Bella Riva and Greenville in detail. Enquires will be made to the District Planning office again for an update of other "latent" developments. Also refer to response in 1.10 above. 1.10.2. CWA Response: There are three points to be made here. Firstly, commercial and industrial nodes do not develop because spatial plans and zonings permit such land use. It only happens where the cumulative agglomeration advantages and symbiotic business interdependencies make it possible. Without a massive catalyst, the existing Fisantekraal Industrial area and the large extent between it and the airport, is unlikely to be developed as a thriving industrial employment node over the next 20 years, despite the 2023 District Plan earmarking it for Industrial use. The take-up of industrial space under the status quo (without the airport expansion) cannot be used as the norm for what could happen with the airport expansion. Secondly, the floor space proposed for the airport is not comparable on a m² basis with ordinary industrial and commercial space that relies exclusively on road-based transport and serves an intracity distribution and manufacturing role. The driver of floor space at an airport are uses that serve intercity distribution and manufacturing. To compare the non-residential lettable land uses at the airport with those on the N1 and R300 that serves a different function is unproductive. Thirdly, a large component of the proposed floor space consists of hangers, Fixed Based Operators facilities for freight handling and storage. As of September 2024, Cape Winelands Airport (CWA) is already experiencing significant demand for space, with confirmed interest across various sectors. Airlines like Safair, Airlink, and others have

			requested hangar space totaling 5,400 square meters. Fixed Base Operators (FBOs) such as Absolute Aviation, Execujet, Signature Aviation, and Fireblade are seeking more than 38,500 square meters to support their high-end services for private and business aviation. General aviation entities, including Air Mercy Services, aircraft manufacturers like Cirrus, simulators, crop sprayers, and training facilities, have submitted expressions of interest totalling 65,090 square meters. Additionally, private airplane owners are looking for hangarage space amounting to 24,900 square meters. This combined demand of over 133,890 square meters, recorded well before the airport's completion, is expected to increase significantly as the project progresses toward finalization. The closer to completion, the higher the demand is likely to soar, driven by the growing recognition of CWA's strategic value and potential to serve as a multifaceted aviation hub. This early interest underscores the airport's future role as a key player in the regional and national aviation industry. Phase 1 of the airport development, covering approximately 200,000m², includes key facilities like air traffic control, passenger terminals, aircraft parking, and operational support services. It features essential infrastructure such as the Aero Museum, GA and VIP terminals, fuelling stations, and maintenance areas. The plan ensures comprehensive services for both passengers and ground operations with provisions for restaurants, retail, car rentals, and public transport. Water and energy systems are established, including biogas and groundwater treatment plants, along with areas reserved for future expansion. The final phase will expand the development to 350,000m², allowing for additional infrastructure and increased capacity. Future-proofing measures include space for pier expansion and terminal reserve, ensuring the airport can accommodate growing demand. The phased approach enables the gradual build-up of critical operational areas like cargo handling, special facilities, and maintenance, while also considering sustainable energy production and water management systems, positioning the project for long-term success.

		1.10.3. There is no reflection of current land use rights (albeit latent) of industrial and commercial land within a 10km radius of the CWA and hence result in an over stipulation of the potential market demand and supply plans. 1.10.4. The DSR is silent about other semi-/ publicly known industrial and commercial developments in various stages of EIA and land use approvals; such as around Lucullus Gardens, Durbanville Industrial Area, to mention a few. Please refer to Figure 1 below  **Figure 1: Development proposals surrounding the CWA to be impacted.**	1.10.3. CWA Response: See response to 1.10.2 above 1.10.4. CWA Response: See response to 1.10.2 above The comment provided by the Urban Planning Department regarding the Cape Winelands Airport (CWA) development and surrounding development applications has raised concerns due to the inclusion of incorrect and inaccurate information. These inaccuracies have the potential to cause confusion among stakeholders, leading to unnecessary delays and complicating the coordination necessary for a project of this scale. It is essential that the information shared aligns accurately with both current and projected developments in the area. There are several inaccuracies in this image, which depicts *"semi-publicly known industrial and commercial developments in various stages of EIA and land use approvals, such as around Lucullus Gardens and the Durbanville Industrial Area, among others."* The area marked in black is labelled as the Bella Riva development, where there are existing rights for residential housing, and a new Site Development Plan (SDP) is underway. It indicates 3,000 residential units and 10,000m² of business space on 85 hectares of land. However, this black-marked area is actually 422 hectares and is referred to in the **Zutari report** "Belcon / Kraaicon Feasibility Study" as "Alternative 4," which is an option for a super container terminal to replace the Belville Container Terminal. The same applies to Alternatives 1, 2, and 3 shown in the image. Bella Riva site is in a similar location but does not have the scale of this. The **Zutari report** discusses the challenges and feasibility of establishing an inland intermodal freight terminal to address the capacity limitations at the Port of Cape Town. The port currently faces constraints due to a lack of available land for terminal expansion,

			leading to issues like congestion, environmental impacts, and infrastructure damage in surrounding areas. Transnet, responsible for port operations, is considering inland intermodal freight terminals as a solution. These terminals would help manage the increasing port activities, reduce road congestion, and promote more efficient and environmentally friendly freight transport, particularly by shifting some operations to rail. The study outlined in the document aims to compare the potential of two sites, Belcon and a notional site in Kraaifontein, as suitable locations for the terminal. It evaluates the technical, financial, socio-economic, and environmental factors that would impact the decision. The City of Cape Town is involved in this planning process to ensure that the siting of an alternative inland port site aligns with its broader socio-economic and urban development goals. The description on “Alternative 1” on the reference image supplied by UPD and marked Figure 1 refers to this “development” as “fully invaded municipal land”. We assume this is an additional error. This site is in fact the second highest ranked site for an inland port in Cape Town as per the report. If this land was available, it would have ranked the highest.

Alternatives 1, 2, 3 and 4 clearly identified on the drawing as development sites, but these are land parcels that have no development applications on them.

CWA believes together with the identified Inland Port site it would be a true multimodal transport facility for Cape Town.

Interestingly site 4 adjacent the airport and shown in black would have ranked highest of the 4 if it was not for land availability.

Table 27: Qualitative MCDA for notional site selection

CRITERIA NAME							
CRITERIA CONSIDERATIONS							
CRITERIA WEIGHT	2	2	1	2	1	2	10
	20%	20%				20%	60%
OPTIONS	Criteria 1SCORES	Criteria 2SCORES	Criteria 3SCORES	Criteria 4 SCORES	Criteria 5 SCORES	Criteria 6 SCORES	OUTCOME
ALT1	1	1	1	3	2	3	1.90
ALT2	3	2	3	3	3	3	2.80
ALT3	1	2	3	1	1	3	1.80
ALT4	1	3	3	3	3	3	2.60

The Greenville Phase 2-4 Development shown in orange is shown as 73 hectares of business and industrial units. This is the expired Garden Cities development referred to in 1.10 above and is zoned agricultural and is 384 hectares.

		Impact on communications infrastructure (masts) 1.11. There is inadequate reference to the existing tall communication masts (and their potential impact on flight paths etc.) as owned by the South African Defence Force (Navy). These are located south-west of the airport site, adjacent to the Klipheuwel Road on Portion 2 of Cape Farm 168.	It shows the Cape Winelands Airport Project in pink as a 35-hectare mixed use development including and intermodal freight village. This pink site is half of the existing airport and is 110 hectares in size. Specialist response: Lucullus Gardens, Bella Riva and Greenville Garden Cities are included in the Socio-economic Scoping report. Other developments to be included in the full Socio-economic Impact Assessment: Alt 3 – Current smallholdings and multiple owners Alt 2: Buhr land (49 ha pro-submission for industrial development) N1 Business Gateway Park: 25 ha approved industrial area Alt 1: Fully invaded municipal land or residential development Farm Nooitgedacht: Pre-submission for 71 ha industrial Development outside urban edge 1.11. CWA Response: The masts are 4km south-west of the airport and not in the direct flight path. The "ICAO Amended Annex 14 Obstacle Assessment Report for Cape Winelands Airport" evaluates potential obstacles around the airport that may affect aircraft operations. Conducted as part of an ATNS WGS-84 survey, the report assesses obstacles based on ICAO Annex 14 standards to determine their impact on both current and future aerodrome operations. It outlines the Obstacle Limitation Surfaces (OLS) designed to ensure safety during aircraft take-offs and landings by keeping designated airspace clear of obstructions. Detailed runway data, including dimensions and specific obstacle limitations, are provided for multiple runways, such as RWY 01, RWY 19, RWY 14, and RWY 32. Several obstacles that penetrate the OLS are identified, including structures such as hangars, trees, and power poles. The existing tall communication masts owned by the South African Defence Force located south-west of the airport site, adjacent to the

		Acknowledge the lack of connection with an operational freight rail line 1.12. Previous concerns raised by the UPD Department regarding the practical disconnect between the non-residential land uses on the airport site and the distant location of the current rail line (no station), about 1 km to the west, has not been addressed.	Klipheuwel Road on Portion 2 of Cape Farm 168 are not on this report and this report identifies no significant obstacles. 1.12. CWA Response: CWA acknowledges the Urban Planning Department's concerns regarding the distance between the CWA site and the existing rail line. However, it is important to clarify that a distance of approximately 1km from a railway line cannot be considered a "distant location" in the context of modern airport and transport infrastructure planning. Many successful airports around the world are located even further from major rail lines but are effectively connected through well-coordinated public transport networks. CWA's phased development approach includes plans for a comprehensive transport network that will address the airport's growing needs over time. In the early stages, efficient alternatives such as expanded bus rapid transit (BRT) systems and shuttle services will ensure seamless connections to the rail line and other key hubs. These measures will ensure accessibility and mobility without the immediate need for direct rail integration. As the airport grows, future rail connectivity is part of the long-term vision, and we are already engaging with relevant authorities to plan for such integration at the appropriate stages of development. This flexible, phased approach allows us to align infrastructure with demand while ensuring that no immediate gaps in public transport connectivity exist. CWA recognize the concern, the proximity of 1km to a rail line is far from prohibitive, and the current transport plan effectively addresses connectivity in the early phases, with provisions for rail integration as demand increases.

		1.12.1. Major multi-modal freight and logistic hubs (as proposed in the DSR documentation), especially in the context of optimization of costs and logistic efficiencies, would have to have a rail line on the site.	 1.12.1. CWA Response: See 1.10 and 1.12 above. While the inclusion of a rail line at major multi-modal freight and logistics hubs can enhance efficiency, it is important to recognize that modern supply chains are increasingly flexible and do not rely solely on rail infrastructure. A phased approach, beginning with road connectivity, can address immediate operational needs while allowing for the potential introduction of rail in later stages, based on actual demand. With advancements in trucking technologies and automation, road transport is becoming more cost-effective, reducing the necessity for rail, especially for short- to medium-distance freight movements. Moreover, the viability of rail depends on freight volume and distance, meaning a cost-benefit analysis should guide whether the significant investment in rail is justified. In a multi-modal hub, air transport is a key component and can effectively only be done at an airport, highlighting the importance of Cape Winelands Airport (CWA). While the railway line is just 1km away, the CWA's landside infrastructure plays a more critical role in supporting the potential of a multi-modal hub than the rail itself. Additionally, modern logistics hubs can achieve high efficiency through technological innovations like automated handling systems and real-time tracking, which optimize intermodal connectivity. Successful logistics hubs worldwide demonstrate that road-based and air transport, integrated with nearby rail or port infrastructure, can be highly effective. Therefore, rail should not be viewed as an immediate requirement but as part of a flexible, long-term strategy that balances costs, air transport, and logistical efficiencies.

		1.12.2. The current location of the railway line is a weak point. Therefore, it is questionable if the 350 000sqm (or large parts thereof) non-residential land uses planned, can actually function as an intermodal logistics hub. Role of CWA in relation to existing airports 1.13. The role of the CWA in the cluster of existing airports and its functions need to be clarified and the demand figure stipulated for now and in future. This will prevent further confusion with many stakeholders regarding the segmentation and/ or duplication of roles between CWA, CTIA (Cape Town International Airport), George International Airport and others.	1.12.2. CWA Response: See 1.12.1 and 1.10.2 above. 1.13. CWA Response: See 1.6.1 above. The introduction of CWA is about enabling and accelerating growth of the market and not imposing limitations. The aviation sector is broad and complex, with multiple unique and heterogenous sub-sectors. It is globally accepted that multiple airport operators can serve different and overlapping roles. **Complementary role as General Aviation Hub** General aviation is a key market and integral part of CWA's business strategy. There are other airfields within 30km of CWA, however each are already at or near their maximum hangar capacity, with short runways suitable for only a small portion of the sector and face significant barriers to expansion due to various factors (location, size, zoning, availability of land). The expansion of CWA will provide much needed relief. CWA will therefore be the only airport in the region other than CTIA with the infrastructure capable of serving the broader General Aviation (GA) sector – a sub-sector that is currently faced with significant capacity shortages rendering the industry unable to serve the ever-increasing demand. With CWA, the GA sub-sector can finally consolidate at one airport in an environment conducive to growth, stimulating further economic activity. In addition to an independent GA traffic forecast that was conducted for CWA, CWA held extensive engagements with GA operators from across the country to gauge the interest and support from industry. It was concluded that there is an overwhelming shortage of GA capacity and facilities within Cape Town across the GA sector. CWA's plans have

			therefore been informed by industry and are a direct response to demonstrated demand. The CWA will play a major role in consolidating general aviation in the region. **Complementary role as Diversion Airport** The decision to apply for an ICAO Code 4F instrument operations and ICAO Category 9 fire and rescue level of protection with a 3.5km runway follow extensive industry consultations with airlines and airline associations. This level of infrastructure and services are required by the airline operators in order to use Cape Winelands Airport as an alternative destination airport in the event of diversions. From the specialist studies it is clear that such capability and capacity will reduce operating costs by up to 5% per flight for current services operating into Cape Town International Airport. The savings in cost is as a direct result of a reduction in fuel uplift and fuel burn, the latter then having a further positive impact by reducing carbon emissions up to 5% per flight. Globally, the airline industry is challenged to achieve Net Zero by 2050. The existence of Cape Winelands Airport will enable a 5% reduction in carbon emissions for every flight flying into CTIA. It will allow Cape Town to be ahead of the curve in being an attractive destination for those users that do not only value lower costs but also environmental considerations – an increasing trend amongst global travellers. Through this CWA will also align to the aspirations as set out in the National Airport Development Plan (NADP). Projected indications are that the cumulative savings or value being retained on an annual basis exceeds R1 billion per annum when considered and calculated across all of the airlines. The specialist studies completed confirm that the further development and expansion of the Cape Winelands Airport will significantly contribute in providing real relief for the airline operators in terms of costs and route profitability. Airline margins are very low, 2-5%, a 5% reduction in the operating costs of a route therefore will make a meaningful impact, not

			only in retaining current airlines but also in attracting airlines where the business case have been marginal to date. The savings have been verified as real and significant and will be a key contributing factor in ensuring growing and sustainable air access into the region, much needed to mirror the growing population and economic activity in Cape Town and the Western Cape. These benefits accrue with airlines continuing to fly into Cape Town International Airport, i.e. as a diversion airport, CWA does not take away any of Cape Town International Airport's traffic. Another key benefit associated with CWA as a diversion airport accrues to the passenger, with the CWA as the diversion airport being located in the same city as the destination airport (CTIA), i.e. currently when aircraft are diverted from CTIA, passengers find themselves in a different city. With the existence of CWA as a diversion airport, passengers will have the immense of diverting to an airport in the same city only 25km away from their intended destination. **Scheduled Services** Considering the major capital expansion project that CWA is embarking on, which includes a 3.5km Code F runway, the gradual traffic growth may seem misplaced. However, the primary reason for CWA implementing such infrastructure is not just about scheduled passenger growth at its own airport – it is to specifically unlock the benefits enabled to the airline sector by introducing a much closer alternate airport for the purposes of diversions and fuel planning on flights inbound to CTIA from day one of the airport opening – as the same level of runway capability as CTIA is required in order to do so. The infrastructure described above, comes into being through an innovative and fresh way of creating world class infrastructure in a manner that also has minimum impact on the airlines and passengers from a tariff and cost perspective. This same infrastructure can and will be used to build scheduled services over time in and out of Cape Winelands Airport. The approach towards

			Cape Winelands Airport's (CWA) introduction into the market is one of measured conservatism with CWA expected to process 5 million passengers per annum over 25 years. CWA is expected to have 25% market share (5 million of 20 million). This equates to CWA's own incremental growth of market share of a very gradual 1% per annum. CWA's conservative and measured approach to traffic development over the 25 years, will enable both CWA, CTIA and other airports to adjust their business plans in keeping with market shifts and growth by positively contributing to CTIA's and CWA's sustainability. Both CTIA and CWA will have their own defined controlled airspace with a defined corridor between the two allowing for VFR (Visual Flight Rules) traffic moving between Stellenbosch and Morningstar Airports and further up the West Coast. Similarly for flights flying south and east along South Coast/Garden Route. **Complementary role as a Reliever Airport** CWA, as a reliever airport will perform multiple functions, from relieving congestion at CTIA during times of temporary increased activity or providing redundancy to the City of Cape Town in times when the airport is closed for an extended period of time. As a reliever airport: • CWA will improve the attractiveness of the city to host major events by providing additional airport capacity. When the city bids for a mega event, air access is always a key consideration and with added airport capacity it could be the difference between being the winning bidding city or not. • CWA will contribute toward continuity of economic activity (trade and tourism) in the event of an extended closure at CTIA. • CWA could provide additional temporary or permanent capacity during peak periods (slot constraint times and peak seasons noting the seasonal nature of visitor trends) • CWA will offer redundancy in the event of catastrophic fires, structural failures, fuel or power supply interruptions etc, etc Add to that the benefits of having a second airport, as is the case with most major prospering cities, ensuring full redundancy in the event of a

			failure of infrastructure, services or systems at any one of the airports. Regular failures have been experienced at CTIA in recent times ranging from fuel supply, availability of runway and power failures. On each occasion the impact on both the airlines and passengers are significant, this in terms of disruption, costs and inconvenience. **Other Complementary roles** As part of future proofing the City the CoCT has been on record expressing for some time now the need and importance of freeing up state land to provide much needed housing. Part of the land being considered is some 668 hectares of well-located, underutilised land that exists at the Wingfield and the Ysterplaat air bases, adjacent to Century City, and at Youngsfield, between Wynberg and Ottery. Should this happen the CoCT will have to ensure that an alternative existing airport will be able to absorb and accommodate such operators in proximity or ideally within the metro. In previous discussions with the City Planners the officials have requested the Cape Winelands Team to consider this need and to ensure the ability to incorporate and consolidate such needs within the Cape Winelands Airport Development should that be required. The developers of CWA can now confirm that it will be in a position to fulfil such a role of incorporating and consolidating all aviation, military and civilian, fixed wing and rotor, for the Cape Town Metro and greater peninsula should that be required. There is no existing airport or airfield better positioned than the CWA to do so. One must ask the question, why 81 years ago was the CWA site identified as the preferred site for an airport? The Cape peninsula with its topography and mountain ranges provide limited options where you require level tracks of land large enough to lay down runways of over 3km's in length. Other than the Joostenberg vlaktes decided upon for CWA there is the Cape flats which eventually became the home for CTIA. Both sites provide the opportunity, CWA then with the added advantage of 400 feet elevation which is an important factor when the Atlantic fog rolls in over Cape Town during some months of the year. The remainder of the peninsula is restricted, other than mountains and

			obstacles, then also by built-up areas, protected areas and development exclusion zones such as the Koeberg nuclear zone. CWA carries the majority support of the neighbouring farmers and farming community and essentially provides a clean slate for responsible and inegrated development. This is on the basis where conflicts between the airport and conflicting land uses such as residential within flight paths and noise zones can be planned and avoided from the start. In doing so CWA will provide the much-needed roles identified i.e. being a reliever airport and providing both additional capacity and redundancy. There is the added benefit of CWA having the opportunity and capability to play a very important role in consolidating numerous smaller military and civilian airport activity over the medium to long term onto one single site. Once CWA has been completed the city will have an added advantage of having two 3.5km unrestricted runways at two geographically independent and separated sites with full redundancy. It is clear that the relationship between CTIA and CWA is complementary in that as a first step CWA allows to grow the market substantially and on a sustainable basis. George Airport is a regional airport in the ACSA stable feeding into CTIA, similar to Plettenberg Bay Airport being a regional airport feeding into CTIA and in future CWA. The two main airports CTIA and CWA can in terms of their respective master plans, co-exist and integrate with smaller surrounding airfields, the consolidated picture essentially representing the Cape Town and Western Cape integrated Air Access Master Plan. **Airport Phasing** The first phase is to start immediately upon all authorisations being in place. The second phase will be triggered by growth in passenger numbers being at 1.7 million passengers per year. NACO projected that this is likely to occur by 2029. Full and final development will be reach when the passenger number reach 5.2 million passengers per annum.

			Competition ACSA has since its establishment had the benefit of operating CTIA for 30 years without competition. CWA's position is that competition in a free-market economy is critically important, this includes competing fairly with competitors, customers and suppliers, alike. Competition benefits both businesses and consumers. It shows companies where they need to improve; encourage organisations to strive for greater efficiency, become more innovative, more productive, and be better businesses, in other words ultimately satisfying unmet demand. It is CWA's view that the proposed investment into CWA should be welcomed as it helps to grow the SA airport network and sector as a whole, while contributing toward a sustainable city.
		1.14. Previous comments provided during the pre-application scoping phase requested clarification of what is meant by the Cape Winelands as a commercial airport. The response "An application in terms of Section s.53 of LUPA will be made and provide more detail re the commercial airport and the intended associated uses and scale of development" is a standard response provided for various comments raised in the pre-application scoping phase that detail will follow in one or the other process.	1.14. CWA Response: See 1.10.2 above. CWA as a commercial airport means that the airport will be designed and operated to serve public passenger and cargo flights, accommodating a wide range of commercial airline activities. This involves regular scheduled flights by airlines, airport services for passengers (such as check-in, baggage handling, and security), as well as cargo and logistics operations. Being classified as a commercial airport implies that it is not limited to private, military, or charter operations but is part of the broader aviation infrastructure catering to business and tourism demand, supporting the economic activities of the region. The commercial focus would typically include infrastructure for airlines, retail, cargo handling, and ground transportation. In the case of Cape Winelands Airport (CWA), this aligns with the strategic goal of positioning it as a significant hub to support Cape

			Town's growing air traffic. The phased development approach for aviation and surrounding infrastructure demonstrates the airport's role in regional economic development. To facilitate the formal approval process for the CWA development, an application will be submitted in terms of Section 53 of the Western Cape Land Use Planning Act (LUPA). The application will require detailed submissions, public participation, and comprehensive assessments to ensure the proposed airport development aligns with planning frameworks and environmental considerations. The Section 53 application will include the intended development for passenger air traffic, cargo operations, and commercial activities, such as retail, hospitality services, warehousing and hangars. The scale of the development is Phase 1 of the airport covering approximately 200,000m² and the final phase expanding to 350,000m². This development will reflect the airport's dual role as both a transportation hub and a catalyst for regional economic growth, integrating various industries and services. Additionally, the application will address the airport's phased approach, including provisions for phased activity levels. It will explore the necessary infrastructure to support passenger and cargo traffic, multi-modal transport facilities, warehousing, and potentially customs facilities for international cargo. This comprehensive planning process will ensure that the airport's development is sustainable, economically beneficial, and aligned with regional growth objectives.
		1.15. The DSR is based on the end state to develop the airfield into a fully commercial airport with very limited detail of the in-between phases. 1.15.1. This limits the UPD Department in evaluating the symbiotic or conflicting roles of the CWA compared to CTIA strategically, and at which stage certain functions may migrate from CTIA to CWA. 1.15.2. Considering the case at CTIA regarding their re-aligned and second runway EIA a decade or so ago, the Environmental Authorisation may be considered likely for some of the phases, but not all of the total end state of the development as envisioned.	1.15. CWA Response: See 1.3.1 and 1.7 above. 1.15.1. CWA Response: See 1.3.1 and 1.13 above 1.15.2. CWA Response: (also refer to 1.17 below)

		Therefore, the CWA may consider positioning certain phases of development, which may result in a step-by-step-approval, or certain cumulative components of the development instead of the end state development to be considered in the EIA.	Please be advised that CTIA does not have EIA approval for their second runway, only for their new realigned runway. A valid consideration in response to this phased approach is that an incremental strategy may also face criticism for not presenting the full scope of the project upfront. By clearly outlining the proposed end state from the beginning, all stakeholders—including role players and investors—can better plan for the long-term. This transparency helps ensure that the necessary infrastructure, environmental mitigation measures, and other critical elements are accounted for early on, facilitating more efficient decision-making and resource allocation. A comprehensive view of the end state allows for a holistic approach to development, which can reduce unforeseen challenges and promote more coordinated efforts among all parties involved.
		1.16. The role of George International Airport is to be understood, considering that there is hardly any mention of this airport, which is located closest to CWA than other airports referenced. Furthermore, it is unclear why George International Airport is not included in the cluster of airports.	1.16. CWA Response: Also refer to 1.17. George Airport is a regional airport in the ACSA stable feeding into CTIA, similar to Plettenberg Bay Airport being a regional airport feeding into CTIA and in future CWA. George Airport is not suitable as a destination alternate airport, for several reasons. One of the main limitations is its runway strength, with a lower Pavement Classification Number (PCN 47), making it inadequate to handle heavier wide-body aircraft like the A350-1000. This restricts its ability to accommodate larger aircraft during diversions. Additionally, George Airport operates under limited hours and is not available for final arrivals outside of these hours, reducing its reliability as an alternate option for Cape Town International Airport. The airport's infrastructure is also insufficient for certain wide-body aircraft, and its ground handling, maintenance services, and apron space are limited, making it less capable of handling diverted traffic. These factors, combined, make George Airport an unfavourable option as a destination alternate for Cape Town International.

			An independent study by a European airport consultant confirmed that the plans for CWA will enable it to be classified as an operational aerodrome, meeting all airline requirements for such a designation. The study assessed six South African airports—Bloemfontein, King Shaka, George, OR Tambo, Port Elizabeth, and CWA—for their suitability as destination alternate aerodromes for Cape Town International Airport (CPT). Military airports were excluded from consideration, as they cannot be nominated as alternates in South Africa. Based on criteria such as aircraft performance, apron and taxiway strength, operating hours, ground handling, fuel services, maintenance, passenger facilities, firefighting services, runway lighting, instrument landing systems, air traffic control, apron space, and meteorological capabilities, the study found minimal competition. Only King Shaka and OR Tambo Airport, besides CWA, are suitable as destination alternates for CPT, with both able to accommodate all aircraft types flying to CPT. However, OR Tambo's high elevation limits the ability of some aircraft to take off at their maximum weight. The master plan for CWA meets all requirements to serve as a destination alternate aerodrome for CPT, and given the significant fuel savings it offers airlines, the study concludes that CWA could become the preferred destination alternate for CPT in the future.
		1.17. The DSR documentation lacks a comprehensive response/ specialist study, which lays out the current functioning of the airfields and airports (or various sizes), and how their anticipated growth will complement rather than compete with each other for passengers and cargo. 1.17.1. The industry should have transparent and practical phasing plans, which both parties agree with, in submitting for replacements or functional replacement roles. 1.17.2. The DSR documentation are not clear on those components in the cluster of airports in the Western Cape. This particularly affect the	1.17. CWA Response Also refer 1.13. We do not concur with the SPD's departure point that airports should "rather not compete". ACSA has since its establishment had the benefit of operating CTIA for 30 years without competition.

			phases of moving into full international commercial cargo and passengers, customs, and such land uses which at the moment is located at CTIA and George International Airport. It is less about the civil aviation function than about the commercial function. For example, Figure 9 of the DSR is not clearly segmenting the role of CWA versus CTIA, vs other in the cluster of airports.	CWA's position is that competition in a free-market economy is critically important, this includes competing fairly with competitors, customers and suppliers, alike. Competition benefits both businesses and consumers. It shows companies where they need to improve; encourage organisations to strive for greater efficiency, become more innovative, more productive, and be better businesses, in other words ultimately satisfying unmet demand. It is CWA's view that the proposed investment into CWA should be welcomed as it helps to grow the SA airport network and sector as a whole, while contributing toward a sustainable city. The Airports Company of South Africa was founded by way of an Act of Parliament, Act No. 44 of 1993: Airports Company Act, 1993. ACSA is prohibited from conducting its business in any way that might restrict fair competition. In terms of the Act and more specifically Clause 5 (2) (d), "..conduct its business in such a manner as to ensure that the company does not engage in any restrictive practice as defined in section 1· of the Maintenance and Promotion of Competition Act, 1979 (Act No. 96 of 1979);' . Anti-competitive behaviour leads to monopolies that are insufficient and does not serve the public efficiently. That is why SA has a Competitions Board to prevent the creation of monopolies and oligopolies from distorting the marketplace. Healthy competition will improve the CTIA's high levels of service delivery even more, and at lower prices. Whereas collaboration is essential within the industry, care should be taken that cartels are not formed, and the decision-making authorities (and relevant IAPs) should be clear on their position in this regard. The formation of cartels in the construction of the FIFA 2010 soccer stadia is an example of how local government and ultimately the taxpayers were exploited. the well published inefficiencies of the Cape Town Port demonstrate the risks to the

			City's economy if well-run monopoly regresses with no alternative to keep it on its toes. A detailed Concept of Operations (CONOPS) report outlines the operational framework and vision for a project or system, serving as a bridge between technical and non-technical stakeholders. It defines the current environment, establishes objectives, and describes how future operations will function, including roles, responsibilities, and necessary changes to infrastructure or processes. In the context of Cape Winelands Airport (CWA), their final CONOPS report covers a comprehensive specialist study that examines the current functioning of airfields and airports of various sizes and provides guidance on how their anticipated growth will complement, rather than compete with, each other for passengers and cargo. The report also emphasizes collaboration among stakeholders, such as air traffic control, airlines, and regulatory bodies, to ensure seamless integration and operational efficiency. Additionally, the report offers a roadmap for implementing the proposed changes, focusing on safety, risk management, and operational standards. It outlines steps required for development, such as infrastructure upgrades, procedural modifications, and technological advancements, ensuring that growth in air traffic and cargo is managed harmoniously across multiple facilities. By presenting a comprehensive plan that aligns future actions with the project's goals, CWA's final CONOPS report supports informed decision-making, ensuring that airfields and airports function effectively and complementarily while maintaining high standards of safety and efficiency. The Cape Winelands Airport CONOPS report considered several key airfields and airports in its study. These include Cape Town International Airport (FACT), which handles both Instrument Flight Rules (IFR) and Visual Flight Rules (VFR) traffic, Stellenbosch Airfield (FASH), which supports VFR traffic, and Ysterplaat Airforce Base (FAYP), primarily used for military purposes. Additionally, several smaller airstrips and local aerodromes within 20 nautical miles of

		1.18. The UPD Department supports the proposal for a detailed economic/ market study to determine the need and desirability of both airports within the regional context of the Western Cape including a consideration of George Airport together with CTIA. This was previously raised by the UPD Department and not adequately addressed in the specialist studies.	CWA were assessed, such as Morningstar, Diemerskraal, and Grootfontein. These airports and airfields are considered for their proximity to CWA and the potential for their traffic to interact with CWA's operations. The report ensures that CWA's anticipated growth complements rather than competes with these facilities, particularly FACT, with which it will share controlled airspace while facilitating both scheduled and unscheduled operations. 1.18. CWA Response: Also refer 17.1 and 1.6. The Need and Desirably will be addressed in accordance with the DEADP guidelines. The 2013 DEA&DP guideline states that "while the concept of need and desirability relates to the type of development being proposed, essentially, the concept of need and desirability can be explained in terms of the general meaning of its two components in which need primarily refers to time and desirability to place – i.e. is this the right time and is it the right place for locating the type of land-use/activity being proposed? The concept of need and desirability can also be equated to wise use of land – i.e. the question of what the most sustainable use of land is. Refer 1.16 and 1.17 The business plan and financial modelling for the Cape Winelands Airport (CWA) are commercially privileged information and cannot be made publicly available. However, we would like to emphasize that the question of "need" in the context of CWA's development pertains primarily to the timing of the project. Based on thorough analysis and projections, we firmly believe that there will definitely be a need for a second major airport in the Western Cape to support growing passenger numbers, cargo throughput, and general aviation demands. The timing of CWA's development is crucial, and CWA feels that this is the right moment to begin the project. Current trends indicate that Cape Town International Airport (CTIA) will face capacity constraints in the coming years, particularly during peak periods. Additionally, the growth of regional and international air traffic, coupled with the expansion of the

			Western Cape's economy, signals that demand for air transport infrastructure will increase. CWA's phased approach to development allows us to align our infrastructure expansion with this anticipated demand, ensuring that the airport will be fully operational when it is most needed. By starting now, we are positioning ourselves to be ready at the optimal time, avoiding delays that could impact regional growth and competitiveness. The Need and Desirably will be addressed in accordance with the DEADP guidelines. The 2013 DEA&DP guideline states that "while the concept of need and desirability relates to the type of development being proposed, essentially, the concept of need and desirability can be explained in terms of the general meaning of its two components in which need primarily refers to time and desirability to place – i.e. is this the right time and is it the right place for locating the type of land-use/activity being proposed? The concept of need and desirability can also be equated to wise use of land – i.e. the question of what the most sustainable use of land is. Based on CTIA's own projections and information from their Environmental Impact Assessment (EIA) for their realigned runway: 1. Current Runway (01-19) Capacity: ACSA estimated that Runway 01-19 would reach its maximum capacity of 30 air traffic movements (ATMs) per hour by 2019. This suggests that the runway has already been operating at or near its peak capacity in recent years. 2. The New Re-aligned Runway (18-36) Capacity: The new, re-aligned Runway 18-36, with a length of 3,500 meters, is expected to increase CTIA's capacity. According to ACSA's estimates, Runway 18-36 is projected to reach its maximum operational capacity around 2032. This runway is designed to handle up to 228,899 annual aircraft operations and 23.2 million passengers annually. ACSA in their EIA for the runway realignment at CTIA has acknowledged the uncertainties in predicting exactly when these capacity limits will be reached due to variables such as demand growth, fleet mix, technological advancements, and regulatory constraints. The projected maximum capacity for Runway 18-36, the new realigned runway is 2032.

		1.19. The UPD Department notes the response that an application in terms of Section 53 of LUPA will be made which will address the national and regional spatial relationships in the context of the Greater Cape Town Urban Spatial Transformation and Economic Transition Region ("GCTR").	Specialist response: The extent to which this is addressed in a Socio-economic Impact Assessment will be considered with input from other specialists. 1.19. CWA Response: Cape Winelands Airport (CWA) is designed to align with South Africa's national and regional urban growth patterns, as well as key economic development goals. The project has been structured to complement the objectives outlined in the National Development Plan (NDP) 2030, focusing on inclusive growth, job creation, and enhanced connectivity. The phased approach of CWA allows the airport to respond effectively to demand while serving as a catalyst for economic development in surrounding areas. By promoting decentralization and supporting the creation of new economic hubs, CWA contributes to reducing urban congestion and aligns with the spatial transformation goals of the Greater Cape Town Urban Spatial Transformation and Economic Transition Region (GCTR). CWA's development is also integrated with regional transportation infrastructure plans. Strategically positioned to connect with existing and future transportation networks, the airport will act as a critical node for air, road, and potentially rail connectivity. This integration ensures that CWA enhances freight and passenger flows within the region. In alignment with the Western Cape Provincial Spatial Development Framework (PSDF), CWA supports the development of a multi-modal transport system, including public transit access and non-motorized transport options, to further reduce reliance on private vehicles and contribute to sustainable urban mobility. Economically, CWA is positioned to be a significant driver of regional and national economic growth. The airport will enhance the region's trade capacity, support tourism, and create employment opportunities across various sectors such as aviation, logistics, and agriculture. By serving as a key export hub for the Cape Winelands'

		Need for airport role players discussion 1.20. The UPD Department is of the opinion that it will serve the decision makers of both the National Environmental Management Act (NEMA) and MPBL processes well if the current EIA process can bring together all the relevant decision makers who are mandated to approve different components of the realisation of an end state airport as indicated in this EIA application.	agricultural products, CWA will connect local producers with global markets. Additionally, the airport's phased expansion will contribute to economic diversification, supporting advanced industries such as technology, finance, and manufacturing, ensuring that CWA supports the long-term economic transition of the Western Cape. In terms of urban integration, CWA's development is designed to promote sustainable and inclusive urban transformation. Surrounding areas will benefit from mixed-use development opportunities, including residential, commercial, and industrial activities. This ensures that the airport not only integrates into the broader urban fabric but also contributes positively to the socio-economic well-being of the region. As the Western Cape transitions into a more diversified economy, CWA will play a pivotal role in positioning the region as a competitive player in the global economy while driving long-term socio-economic benefits. 1.20. CWA Response: Airports by nature are highly regulated in terms of infrastructure, standards, quality and services, this in terms of ICAO, Department of Transport and the Civil Aviation Authority (SACAA) as the competent authorities. The UPD Department can with the greatest of confidence leave it to these authorities to deal with and resolve conflicts, if any. A more productive role for the UPD Department will be to consider how specialist transportation systems road, rail, air and sea ports best be integrated spatially to ensure effective multi-modal transport systems allowing seamless transitions between the respective modes. The CWA team has spent significant time understanding how it could long term best contribute towards this key objective, using current properties i.e. CWA and current transport infrastructure i.e. N1, rail line running past CWA and connecting both Ports of Cape Town and Saldanha.

			The UPD Department is best positioned to bring these major providers of transport systems and technical solutions together i.e. SANRAL, Transnet, PRASA, ACSA and CWA to ensure effective integration and long-term sustainability. An integrated approach by local and provincial authorities will help in providing both clarity and efficiency in the development of the proposed airport. By coordinating efforts between municipal planning, environmental regulation, transport infrastructure, and other key departments, decision-makers can ensure that all relevant aspects of the project are aligned. This collaboration would streamline the approval process, minimize delays, and address potential conflicts early on, thereby fostering a more cohesive and well-managed path towards the realization of the final airport development. Such an approach would also ensure that the infrastructure, environmental, and economic needs of the region are comprehensively addressed, benefiting both the project and the broader community.
		1.20.1. Clarity be provided by the different mandate holders regarding the principles and information required to come to such consideration. If the debate and dispute continues only via submission of letters of concern or complaint in the EIA process, without creating the space for verbal interaction and consideration or each other's views, the EIA process will be delayed, and may not result in a win-win situation for any of the airport asset owners or operators.	1.20.1. CWA Response: While the idea of fostering greater collaboration and open dialogue is commendable, CWA is concerned that the existing process timelines are simply not conducive to meaningful progress. Although the EIA process is designed to ensure thorough evaluation and careful consideration of all stakeholder concerns, it risks becoming unnecessarily protracted without defined milestones to drive timely resolution. The continuous cycle of debate, exacerbated by the lack of direct, solution-driven engagement between key stakeholders, threatens to stall the momentum of the entire project. CWA believes that while open dialogue and consensus-building are crucial, the proposed framework is too cumbersome and lacks the necessary agility to support efficient decision-making. Without a more streamlined approach, CWA fears that the project may face significant delays, ultimately hindering the development and creating missed opportunities for all airport asset owners, operators, and the broader regional economy. It is vital that timelines be

		Interpretation of the MSDF and Northern District Plan 1.21. The MSDF and the Northern District Plan were quoted in the comments and response report (Appendix 30 of the DSR) as motivation to some comments submitted by other entities, namely the Airport Company of South Africa (ACSA). The spatial plans were also used as reference to some responses by the EAP. The following clarity is provided on the policy statements of these reports, to ensure no confusion or misinterpretation: 1.21.1. The MSDF recognises Cape Town International Airport (CTIA) as a key economic asset of the City that needs to be protected and supported in order for it to continue its current role and anticipated future expansion.	adhered to ensure that progress is not only achievable but aligned with the broader objectives of the project and its stakeholders. EAP response: The NEMA EIA process is regulated with set timeframes and deliverable dates. Consultation with parties responsible for input or authorisation of certain milestones is to be included within this timeframe. 1.21. Noted. 1.21.1. CWA Response: CWA emphasizes that while the MSDF rightly recognizes CTIA as a singular key economic asset, with the introduction of CWA, the MSDF would need to acknowledge both CTIA and CWA as vital assets for both the local and regional economy. Currently, Cape Town has only one airport, and it is imperative to protect it within the existing spatial planning framework. However, the introduction of CWA means the MSDF must adapt to recognize the importance of both airports, ensuring that they contribute to economic growth, connectivity, and resilience for future expansion. Noted and agree in as far as "protection" is used in a spatial planning context as is the intention of the MSDF. But it is not the City's role to protect the CTIA's monopoly and from business competition. The MPBL is clear in s.99(2)(e) that the City must consider *the impact on existing rights (other than the right to be protected against trade competition).* This distinction reinforces the idea that while spatial planning can protect infrastructure assets, it should not interfere

		1.21.2. The MSDF supports complementary and appropriate land development at the CWA that will contribute to the efficiency of CTIA in terms of general aviation and related uses. [The policy statements does not explicitly confirm commercial and international cargo or passenger related land uses as appropriate].	with market competition between businesses, which strengthens CWA's position for the development of a second airport. Imagine a city that has only one bridge connecting two important economic hubs. Naturally, that bridge would be protected at all costs, as it serves as the only critical link between the two areas. The city would prioritize maintenance, upgrades, and even restrictive zoning around it to ensure it continues functioning without disruption. This protection is essential because without it, the economy would suffer greatly. However, if a second bridge were to be built, the need to "protect at all costs" shifts. Now, both bridges are vital to the city's infrastructure and economy. The role of the city changes from solely protecting the first bridge to ensuring that both bridges are maintained and allowed to operate freely, enhancing connectivity and economic growth. At this point, the city's focus would not be on protecting the first bridge from competing with the second but rather ensuring both can coexist and serve the public effectively. Similarly, with only one airport (CTIA), the MSDF must prioritize its protection. But with the introduction of CWA, the focus should shift to recognizing both airports as essential economic assets. The City's role isn't to shield CTIA from competition but to allow both airports to function together, benefiting the broader economy without interference in the natural business dynamics. Specialist response: The view expressed by CoCT is not in line with the economic growth and development of the Western Cape economy and specifically the broader CoCT area. 1.21.2. CWA Response: Noted and agree. The policy does not specifically preclude commercial and international cargo and passenger flights either.

			Secondary airports play a crucial role in complementing primary airports by alleviating congestion, serving different market segments, and providing alternative routes and services that enhance overall aviation capacity. Secondary airports often attract low-cost carriers (LCCs), regional flights, and general aviation traffic, allowing primary airports to focus on long-haul and high-value operations. This relationship creates a symbiotic system, where secondary airports reduce pressure on primary airports, improve connectivity, and offer more flexible options for travellers. For example, Gatwick Airport plays a complementary role to Heathrow by focusing on short-haul, budget-friendly flights with LCCs like easyJet, while Heathrow prioritizes long-haul, international connections and premium passengers. This division of roles maximizes efficiency in the London aviation system, offering more choice and reducing congestion at Heathrow. Similarly, Cape Winelands Airport (CWA) is poised to complement Cape Town International Airport (CTIA) in much the same way. CWA can serve as a hub for LCCs and regional routes, allowing CTIA to focus on premium long-haul flights and international connections. This complementary relationship will help alleviate capacity constraints at CTIA, enhance Cape Town's overall aviation capacity, and provide more options for travellers. Furthermore, by developing general aviation, cargo, and scheduled traffic offering different routes and carriers, CWA will support CTIA's efficiency while catering to specific market needs. Just like Gatwick is to Heathrow, CWA can complement CTIA by offering diverse services, improving the region's aviation infrastructure, and ensuring long-term sustainability for both airports. While CWA will primarily focus on accommodating smaller scheduled airplanes and General Aviation traffic to enhance CTIA's capacity, this does not preclude CWA from handling larger aircraft. The airport is designed with the flexibility to manage a range of aircraft sizes, including bigger planes, ensuring it can adapt to varying operational demands and contribute to the overall efficiency of air traffic in the region.

		1.21.3. The MSDF focuses on matters relating to land use and the long term spatial planning and does not include operational details associated with the operations of both airports and in particular, the proposed CWA to cater for scheduled commercial aircraft operations. This is outside of the MSDF policy guidance because it is effectively outside the mandate of the City to stipulate the appropriateness of such land uses. The mandate sits with the National Department of Transport and separate regulatory processes.	1.21.3. CWA Response: Noted and strongly agree.
		1.21.4. The Northern District Plan (NDP) is aligned with the MSDF. With regards to the development of the CWA, similarly than the MSDF, the NDP does not provide operational details. The NDP states that any extension to the existing operations, or application for amendment of approvals (existing) need to follow due process, as may be prescribed.	1.21.4. CWA Response: Noted and agree.
		1.22. The EAP/applicant is cautioned of the following stipulations in the MSDF, which highlights the investment partnerships guidelines in new developments:	1.22. The EAP notes the comment. CWA Response: Cape Winelands Airport (CWA) aligns well with multiple aspects of the Municipal Spatial Development Framework (MSDF) and can provide substantial benefits to the city of Cape Town. By integrating into the Incremental Growth and Consolidation Areas (IGSAs), CWA can drive public-private partnerships, attracting investment in infrastructure that serves both existing communities and future developments. The airport's phased development approach matches the city's engineering masterplan, making it a candidate for public investment in bulk services like roads and utilities. Additionally, CWA could benefit from grants for new development areas, especially those tied to green infrastructure, as it incorporates sustainable elements like vertical wind turbines. CWA could also contribute to the Urban Inner Core (UIC) by improving transport links and easing congestion at Cape Town International Airport (CTIA). By offering alternatives for cargo operations, low-cost carriers (LCCs), and general aviation, CWA can diversify the region's transport infrastructure. This would make Cape Town more competitive, attracting more airlines, creating jobs, and promoting economic growth. The airport's focus on sustainable

Table 4.2: Investment partnerships for spatial transformation

STA	INVESTMENT PARTNERSHIP	INVESTMENT PRIORITY	PUBLIC EXPENDITURE	GRANT PRIORITISATION	PRIVATE SECTOR OPPORTUNITIES
URBAN INNER CORE (UIC)	Public sector investment priority. Areas of co-investment between public and private sector (development charges and City budget allocations cover capital and operational cost of infrastructure).	Future proofing of UIC through bulk infrastructure prioritisation. Cross-sectoral collaboration, maintenance and upgrade of bulk engineering infrastructure and social infrastructure.	Priority: Implementation of key public sector interventions associated with bulk and social infrastructure, including existing and planned public transport network.	Urban development zone. Special economic zones. Manufacturing incentives. Social housing restructuring zones. Prioritised human settlement areas.	Spatially targeted mechanisms, incentives and facilitation to support urban regeneration and spatial integration, increase access to affordable housing opportunities and drive sustainable and inclusive economic growth.
INCREMENTAL GROWTH AND CONSOLIDATION AREAS (IGSAs)	Public sector investment priority. Areas of co-investment between public and private sector.	Serving existing developments and communities. Subject to capacity of existing services. Alternatively, financially feasible inclusion in utilities master planning with co-financing.	Priority for phased bulk engineering infrastructure, subject to the City's engineering masterplan.	Full suite of grant funding in support of new development areas and development focus areas. Restructuring zone, where aligned to TOD imperatives.	Development permitted, subject to network capacity. Spatially targeted cross-subsidised social infrastructure. Limited incentives.
DISCOURAGED GROWTH AREA (DGA)	Self-funded areas for private sector land development. City and the public sector will not co-finance the provision of bulk engineering and social infrastructure beyond the City's master planning and urban development edge.	Zero priority for public sector funding for land development beyond that permitted within agriculture and rural zonings.	May include funding by government of bulk infrastructure of regional importance. National government grant funding/ permitted financing programmes and incentives to support agriculture as economic sector.	Bulk, link and reticulation engineering and social infrastructure self-funded and subject to determination of engineering services as per sections 65(3) and (5) of the MPBL.	Preferred activities include those related to agriculture and rural zonings. In the event of land development approval(s), will be subject to determination of financial implications on Council's engineering services masterplans.
CRITICAL NATURAL ASSETS (CNA)	Public sector priority and partnerships based on preservation and enhancement of natural assets.	Focused on enhancement, expansion and increasing accessibility to assets.	Priority	Partnership based on protection and enhancement of natural resources.	Limited tourism-related development opportunities that do not compromise assets.

Figure 3: Extract of Table 4.2 on page 56 of the MSDF.

1.22.1. There will have to be an investment partnership with the City's various directorates. All development and support of the City will be subject to service capacity of existing services networks, and subject to engineering masterplans. Limited incentives will be available.

design could also align with the city's goals for future-proofing infrastructure and promoting environmental resilience.

Furthermore, CWA offers potential benefits to rural areas, especially Discouraged Growth Areas (DGAs), by improving logistical support for agricultural exports. Its cargo facilities could connect Cape Winelands and other rural regions to international markets, promoting rural economic development. By preserving nearby natural assets and promoting eco-tourism, CWA's environmentally conscious approach also fits into the Critical Natural Assets (CNA) zone, ensuring that development aligns with sustainable tourism and conservation objectives.

Overall, CWA's development would not only relieve pressure on CTIA but also provide a balanced growth strategy for the city, combining economic expansion, environmental responsibility, and spatial transformation.

1.22.1. CWA Response:

It is not always the case for all private sector development to bear the cost of critical infrastructure projects without subsidy.

The development of Cape Winelands Airport (CWA) aligns with established precedents in cities around the world where strategic infrastructure projects have been supported through financial incentives and public-private partnerships. As demonstrated in global examples, it is widely recognised that providing rates rebates,

			infrastructure subsidies, and incentives for sustainable development is a standard practice for cities aiming to stimulate economic growth and enhance regional competitiveness. CWA's development offers Cape Town a similar opportunity to leverage such incentives to unlock significant long-term economic benefits. Internationally, cities such as Dubai and Berlin have adopted this approach to support the development of major airports like Al Maktoum International and Berlin Brandenburg. In these cases, local governments provided infrastructure subsidies, tax breaks, and co-investment in transport networks, recognizing the far-reaching economic and social impacts of a well-developed airport. These incentives have proven instrumental in attracting business investment, driving tourism, and creating jobs—outcomes that are equally attainable for Cape Town through the development of CWA. Additionally, incentives tied to sustainability are increasingly common in global airport development. Cities like Stockholm, through projects such as Arlanda Airport, have successfully supported eco-friendly initiatives by offering green infrastructure subsidies. CWA's sustainable features, including renewable energy integration and the use of frangible fynbos, align closely with Cape Town's own environmental priorities. Offering similar support to CWA would not only enhance the airport's development but also reinforce Cape Town's position as a forward-thinking, environmentally conscious city. Given these well-established precedents, it is clear that providing strategic incentives for the CWA development is in line with global best practices. These incentives will ensure that Cape Town remains competitive, attracts new businesses, and fosters sustainable growth, making CWA a critical asset to the region's economic future.
		1.22.2. The cost and financial implications for each role player in the bulk and link infrastructure network system may be required at the early stages of the planning documents (such as the EIAs).	1.22.2. CWA Response:

			Yes, it must be done, but it falls under s.65 of the MPBL and not under NEMA. It is clearly falls under municipal planning which Constitutionally the City must deal with under its MPBL. Cape Winelands Airport (CWA) requires infrastructural development that exceeds the scope of the standard bulk infrastructure calculators used by the City of Cape Town. Airports, by their very nature, have distinct capacity demands in critical areas such as transport networks, stormwater management, water supply, sewerage, and solid waste systems. These demands arise due to the scale and complexity of airport operations, which include continuous passenger and cargo services, 24/7 operations, and a wide range of ancillary services. Transport networks must accommodate larger and more frequent traffic flows, while stormwater management systems need to handle extensive impervious surfaces like runways and aprons. These specialized demands go beyond the assumptions typically made for other types of developments. Recognizing these unique requirements, CWA understands that the demand from airports is evaluated on a case-by-case basis. This approach ensures that the necessary infrastructure is appropriately scaled to the specific operational needs of an airport. Given CWA's role in serving the public and contributing to regional economic development, it would be common for the associated development contributions will be subsidised to reflect the public benefit nature of airport infrastructure.
		1.22.3. A package of plans submission may be required, including a phasing plan for engineering services provision.	1.22.3. CWA Response: Noted and see 1.3. A Package of Plans approach may not be necessary for two phases where all precincts are developed simultaneously. Engineering phasing plans will definitely be necessary. This will be discussed in the Pre-application consultation in terms of s.70 of the MPBL.
		1.22.4. Applicants are advised to generate motivations for a site-specific deviation from the City's Council-accepted vision of a more compact and integrated City as communicated in the MSDF and the DSDFs.	1.22.4. CWA Response: Noted, the process prescribed in s.9 of the MPBL will be followed.

		1.22.5. Motivations are required as to why the protection of areas of agricultural significance (if applicable) or critical natural assets are not essential anymore or not applicable in the application (SPLUMA and LUPA).	1.22.5. Noted.
		1.22.6. The public sector most likely will not invest or utilise any grant funding to finance engineering services expansions for human settlement or conventional urban development projects in isolated locations in the Discourage Growth Areas (DGA), considering the contradiction with the inward growth premise. Although the UPD Department is satisfied that the potential impacts have been highlighted, the above comments highlights shortcomings in the current documentation, which requires further assessment in the forthcoming reports.	1.22.6. Noted. CWA Response: It must be pointed out that the proposed development is not "*a conventional urban development*" as suggested here.
		2. Spatial Planning and Environment: Development Management Department 2.1. The Development Management Department has indicated that its previous comment remains applicable and satisfied with the scoped impacts.	2. 2.1. Noted
		3. Human Settlements: Forward Planning Department Human Settlement Development 3.1. The NDP has identified and investigated sites within the North East Corridor for possible housing initiatives and recognizes its potential in producing an increased number of subsidized housing opportunities and also leveraging private partnerships to produce open-market suburbs to ensure the development of integrated communities. It has identified Housing Priority Action Areas in the north-east region for short and medium term housing initiatives to occur and the project sites are located within the prioritized action areas. The bulk infrastructure required in the different project sites is largely in place or at an advanced planning stage. 3.2. The CWA expansion is significant to the form of the City rural areas, and has significant implications to the existing and future human settlement development of the Greenville Garden Cities development project.	3. 3.1. Noted CWA Response: Of critical importance when expanding human settlement will be to ensure the right level of economic development and job creation in the same area, this if we are to successfully reverse the historical poor practices of the past where residents have to travel vast distances and spend out of the ordinary amount of time and money to get to work and back. The airport development and its broader commercial precinct is exactly the type of differentiator and force multiplier you need as an anchor development to create integrated spaces where people can work, live, learn and play in close proximity. 3.2. Impacts will be assessed as part of the impact assessment phase of the EIA.

		3.2.1. The Concept Plan for Greenville Garden City (6 Phases), was endorsed by the Western Cape Government as part of the original rezoning and Phase 1 subdivision approval.	3.2.1. CWA Response: The approval for what is now known as Greenville Erf 4, has lapsed. Also refer response in 1.10
		3.2.2. The Greenville development consists of 770 hectares (15 hectares of which are City-owned). The Greenville New Town is contiguous with the urban edge and lies approximately 4km to the north of the established and growing suburb of Kraaifontein.	3.2.2. CWA Response: Refer response in 1.10
		3.2.3. The Greenville development is providing opportunities for affordable human settlement development. The overall development plans to provide 14 562 residential opportunities (state-assisted, finance linked and market), including business and industrial GLA.	3.2.3. CWA Response: Refer response in 1.10
		3.2.4. The expansion of the CWA airport will have a significant impact on the noise levels, traffic congestion and potentially securing open market opportunities.	3.2.4. Impacts will be assessed as part of the impact assessment phase of the EIA.
		3.2.5. The documentation is to refer to the Greenville Garden City Development as the future phases of the project will continue and is anticipated to be impacted by the airport expansion.	3.2.5. CWA Response: Noted. Likewise, any future application where rights have lapsed will have to take into account the existing rights of the Cape Winelands Airport on Portion 4 of Farm 474 Joostenbergs Kloof and Portion 10 of Farm 724 Joostenberg Vlakte which was seemingly omitted in the original approval which has now lapsed.
		Noise impact 3.3. Based on the conclusions of the Baseline Noise and Scoping Report (Appendix 5 of the DSR), the Fisantekraal residential area will be impacted by the airport expansion, as the frequency of aircrafts will increase the current noise levels.	3.3. The comment is noted.
		3.3.1. The Baseline Noise and Scoping Report does not indicate the noise impact of the proposed CWA expansion, but rather measures the current noise levels. The forthcoming Noise Impact Assessment Report is to measure the impact of the airport expansion and the further activities and uses on the surrounding environment.	3.3.1. The Noise Impact Assessment forms part of the Impact Assessment Phase of the proposed project and will be circulated to all registered I&APs during the IA commenting period.
		Socio-economic impact	

		3.4. The Socio-economic Scoping Report (Appendix 12 of the DSR) noted the impact of the future development and did not yet consider the surrounding areas and potential impacts on the existing residential development. Transport impact 3.5. The Transport Scoping Report (Appendix 20 of the DSR) indicates the future developments impact on the area, and the planned roads within the Greenville Garden Cities development. The forthcoming Traffic Impact Assessment (TIA) is to address safety of surrounding communities in the road design, such as efficient pedestrian zones. Conclusion 3.6. The Human Settlements Department notes the potential impacts. However, the existing Greenville Garden Cities development and future phases of the project must be taken into consideration during the EIA process. The impact on noise, traffic congestion, and potential loss of securing open-market buyers must be considered. 4. Economic Growth: Policy and Strategy: Economic Analysis Department Appendix 12: Socio-economic Scoping Report dated September 2023 compiled by Dr Jonathan Bloom 4.1. The section dealing with Socio-economic scoping of the proposed expansion of the CWA provides much detail regarding the exact plans for the expansion and the economic contours of the surrounding area. However, it does not provide economic analysis of the likely impact that the expansion of the CWA will have on the regional economy. It also draws alignment with a range of strategic documents from the City but refers to the old 2013 Economic Growth Strategy rather than the 2021 Inclusive Economic Growth Strategy (IEGS) – though this document is referred to in the broader scoping report. Forthcoming reports are to draw strategic relevance from the latest 2021 IEGS.	3.4. Specialist response: The Impact on surrounding areas will be considered in the Impact Assessment phase, and the specific impacts defined in conjunction with the EAP. 3.5. The comment is noted. 3.6. Noted. The Socio-economic Impact Assessment will consider the impact on property prices. 4. 4.1. CWA Response: The savings in fuel costs and carbon reduction are not unsubstantiated but rather independently and professionally validated by way of the CWA Diversion Airport Analysis i.e. refer the Pace Laboratories Report. This data has been further validated in one-on-one engagements with the respective airlines, in summary these savings are real and substantiated. The savings are not….” based solely on the assumption that inbound flights will be able to reduce their reserve fuel capacity by potentially diverting to CWA under emergency conditions, rather than Johannesburg or eThekwini (as per Appendix 28 of the DSR).” The savings incurred are based on every actual flight operated to CTIA, whether it diverts or not. Diversions do not happen every day but that is not the issue, airlines by law have to carry the additional fuel on every flight regardless, it is not a

			matter for discretion. CWA will provide a far more effective and efficient planning alternative and the savings are real, as from flight 1 to CTIA on Day 1 with the opening of CWA. As for weather related diversions, specialists have confirmed based on weather data of the last 20 years that CWA will be available to CTIA as an alternative diversion airport 96% of the time, refer the Munich report. For the other 4% CWA will not be available to CTIA as a diversion airport, for these particular flights airlines will nominate an alternative further away i.e. ORTIA or KSIA, for these flights the airlines will uplift additional fuel accordingly. As for air passenger volumes, as explained elsewhere, CWA's entry will allow the passenger volumes and number of routes and destinations served to increase. The NACO forecast furthermore confirms that CWA will take 25% of the market by 2050. Incidentally, the ACSA traffic forecast corroborates this forecast done by NACO. Specialist response: Impact on local economy and the alignment with 2021 IEGS will be addressed in impact assessment phase.
		4.2. Despite alluding to the use of a macro-economic impact model in Section 1.3 Approach and Methodology, there is no discernible use thereof at any point in Socio-economic Scoping Report.	4.2. The Socio-economic Impact Assessment will provide the required information.
		4.3. Section 6. Assessment of Impacts merely outlines potential points for consideration without providing any quantifiable estimates for either the employment or economic impact of the project.	4.3. The Socio-economic Impact Assessment will provide the required information.
		4.3.1. Given the advanced stage of planning for the proposed CWA expansion, an estimate of construction costs and operational requirements is expected and be available to quantify the potential benefits of the project. This information is to be provided in the forthcoming reports, as it will be essential in understanding the economic impact of the proposed development.	4.3.1. The Socio-economic Impact Assessment will provide the required information.
		4.4. Additionally, Section 2.3. makes the following bold and unsubstantiated statement regarding the role of the CWA in driving carbon reduction	4.4. The study by PACE provides the background substantiated information to this comment quoted from the Socio-economic Scoping report.

		towards the goal of net-zero carbon emissions: "Reducing take-off weight enables significant economic, ecological and operational benefits for the airline industry through reduced fuel consumption and carbon emissions, while increasing cargo-carrying capacity. This substantially reduces the net cost of flying into Cape Town. This reduction in net cost will significantly boosts tourism by enabling new route development. Furthermore, the CWA will be the single most impactful intervention by South Africa in assisting the global aviation industry in reaching its "net-zero by 2050" carbon goals (Source: Cape Winelands Airport)." 4.4.1. This statement is based solely on the assumption that inbound flights will be able to reduce their reserve fuel capacity by potentially diverting to CWA under emergency conditions, rather than Johannesburg or eThekwini (as per Appendix 28 of the DSR). Using such a baseline, without due consideration for reasonable expected impact of increased private jet usage, lowered per flight occupancy rates, or increased reliance on air travel by visitors to the city, is misleading. Additionally, no comparison is made to any other carbon reduction interventions undertaken by the aviation industry in South Africa. 4.4.2. The reliance on statements of this kind, accepted directly from the CWA without question, raises questions to the objectivity of the analysis. Relying heavily on this motivation also creates a requirement for supporting clarification on the need and desirability of the CWA as an alternate landing site to Cape Town International Airport (CTIA) in the case of weather related contingencies, given the close proximity of the two sites. 4.5. While a case is made for the tourism benefits of the proposed development, and projections of air passenger volumes are provided, how the CWA will increase net arrivals over and above cannibalising CTIA arrivals – this should take into account CTIA's planned expansion. Appendix 23: Spatial Planning and Land Use Report dated 16 February 2024 compiled by H&A Planning 4.6. The report highlights the proximity of the existing CWA to 3 (three) areas of importance: environmentally sensitive areas; designated agricultural	The Climate Change Impact Assessment will assess and quantify the impact of carbon emissions. 4.5. Refer previous responses provided on this repeat comment. 4.6. Refer previous responses provided on this repeat comment.

		land; and the boundary of the urban edge within Discouraged Growth Areas. The report states the following on page 17: "The Cape Winelands Airport is explicitly supported and encouraged to address the market needs in the areas. Inter-dependent associated economic activities and the maximisation of economic opportunity within and in immediate proximity around the airport property are encouraged."	
		4.6.1. As noted in the report, an informal settlement, on land designated for agricultural use, is 4.5km north-west of the proposed expansion. As the majority of the land surrounding the CWA is currently zoned as agricultural or unused, the development and expanded operation of the CWA logically adds to the risk of expanded informality in the area, including within Discouraged Growth Areas and Environmentally Sensitive areas. This aspect of the development adds both an element of risk and financial costs to the City. These risks and costs are not properly evaluated in the Socio-economic Scoping Report.	4.6.1. Response from specialist: Potential informal settlement establishment will be addressed in the Socio-economic Impact Assessment report
		5. Urban Mobility: Transport Impact Assessment and Development Control Branch	5.
		5.1. The Transport Impact Assessment and Development Control Branch has indicated that its previous comment remains applicable and sets out its requirements to be included in a full Transport Impact Assessment for the proposed CWA expansion, including a requirement for further engagement.	5.1. Noted. Further engagement is currently underway between the Transport Impact Assessment and Development Control Branch and ITS.
		5.2. Previous comments have been captured and responded to within the Comments and Responses Report.	5.2. Noted
		5.3. Technical meetings have been held between the appointed Transport Engineer and City officials from the Urban Mobility Directorate and transport engineers involved with the Bella Riva and Greenville development to the west and south of the CWA site (first meeting took place on 13 August 2024).	5.3. Noted. Further engagement is currently underway between the Transport Impact Assessment and Development Control Branch and ITS.
		5.3.1. The first meeting was attended by officials from Project Planning and Conceptual Design, Roads Infrastructure Management and Transport Impact Assessment and Development Control.	5.3.1. Noted

		5.3.2. The next meeting is scheduled for 22 August and will progressively inform the detailed aspects to be analysed in the Transport Impact Assessment for the CWA including the surrounding development and transport environment. 5.4. In addition, the following should be noted: 5.4.1. The latest proposal to exclude any development (including freight related development) to the east of the runway from this application, does not remove the need for a road reserve to link these possible, and highly likely airport related activities to the CWA, and should be further explored. Recommendations 5.5. It is recommended that the applicant continue with the current engagement with the City's Urban Mobility Directorate as well as Provincial and National role-players and surrounding developers in order to find an acceptable transport solution for the proposed development, as also recommended in the TSR. 5.6. In addition to the current input provided, the Urban Mobility Department will provide further detailed comments on the development during the land use application stage, including comments regarding the detail of transport infrastructure required for each development phase at the time of development. 6. Urban Waste: Integrated Planning and Waste Strategy Branch Integrated Planning 6.1. During the construction phase, the Integrated Waste Management By-law 2009 as amended must be complied with. All waste produced during the construction phase must be transported by an accredited service provider. Disposal 6.2. The waste disposal facilities for both the disposal of general and/or hazardous waste must be specified in the forthcoming reports.	5.3.2. Noted 5.4. CWA Response: Expansion of the CWA or any related land-uses to the East of the current SDF, will require a separate land use application. Development between the airport and the R304 is not foreseen in the near future and is not part of this application. 5.5. CWA Response: Noted and agree 5.6. Noted 6. 6.1. Noted and will be included in EMPr. 6.2. Noted and will be included in EMPr.

		Collections	
		6.3. Solid Waste (Collections) as the service provider in the CWA area has sufficient unallocated capacity to accept and collect and dispose of all types of waste to a designated licence landfill site.	6.3. Noted and will be included in EMPr.
		6.4. A good waste management system must be in place to handle all waste generated by the activities and mitigate against negative impact on the environment.	6.4. Waste Management Plan to be included in IA Phase and EMPr
		6.5. The generation of construction waste and waste during the operation phases should be recycled on site or re used to fill up other sites and clean builder's rubble can be disposed of at the nearest licenced under the guidance of the City of Cape Town.	6.5. To be included in EMPr
		6.6. The waste generated by the construction personnel e.g. lunch remains, packaging etc. must be placed in approved refuse bins on site during the construction phases.	6.6. To be included in EMPr
		Waste Services: Waste Markets	
		6.7. For the food waste and packaging from the planes what would be the fail-safe methods to prevent the waste from just being diverted to landfill without considering the two alternatives (bio digester and recycling). It is questioned whether provision will be made for any S@S (Separation @ Source) bins within the airport facilities to promote the S@S if one general waste bin will be provided.	6.7. To be included in EMPr
		The above comments are to be addressed and included in the forthcoming EMPr.	
		7. Community Services and Health: Environmental Health Department	7.
		All potential impacts in terms environmental health have been identified. The below comments are to be addressed in the forthcoming reports:	
		7.1. Vector and odours mitigation measures to be implemented for the bio-digester and composting and must be addressed in the forthcoming Environmental Management Programme (EMPr).	7.1. To be included in EMPr

		7.2. The Environmental Health Department recommends that Option 1 (Construction of pump station and associated rising main to pump sewage to Fisantekraal WwTW) for sewage disposal be used.	7.2. Noted
		8. Community Services and Health: Air Quality Management Unit	8.
		8.1. The Air Quality Management Unit indicated that its comments have been captured and responded to in the Comments and Responses Report.	8.1. Noted
		8.2. The Air Quality Management Unit reviewed the Air Quality Baseline Report (AIR) dated March 2024, and require the following to be included, where applicable:	8.2.
		8.2.1. The Sensitive Receptors are also to be listed in tabular form in the AIR.	8.2.1. Noted
		The following is noted:	
		8.2.2. The latest Aviation Environmental Design Tool (AEDT) will be used for the development of the emissions inventory and the AERMOD atmospheric dispersion modelling tool, together with AERMET, which is the meteorological data pre- processor, will be utilised, however, the Model Version is to be included.	8.2.2. Noted
		8.2.3. The refuelling pumps and retail service station to be included in the Stationary sources in Section 2.2.	8.2.3. Noted
		8.2.4. In addition to the mentioned emission sources, the emission sources identified within the 10km radius of the CWA will be included in the emissions inventory for the determination of potential cumulative air quality impacts, which is found acceptable.	8.2.4. Noted
		8.2.5. ICSA Durbanville Crematorium is to be included under Industrial Sources in Section 2.3.	8.2.5. Noted
		8.2.6. Four years (2016-2019) of hourly local meteorological data from the Cape Town International Airport weather station, will be used as input for the air pollution dispersion modelling.	8.2.6. Noted
		8.2.7. The measured ambient concentrations from three ambient air quality monitoring stations being Wallacedene, Paarl and	8.2.7. Noted

		Stellenbosch, from January 2019 to July 2022 are utilised as background concentrations, which is found acceptable. 8.2.8. In the Emission Information point 5.2, that Benzene (C6 H6) was not included in the pollutants to be modelled. Benzene emissions are to be incorporated in the AIR. 8.3. Further conditions may be provided during the review of the Atmospheric Impact Report. 8.4. All rights are reserved by the City of Cape Town Head: Specialised Environmental Health Services /Air Quality Officer to call for any further requirements in terms of the legislative provisions governing air quality matters, should the need arise. 9. Community Services and Health: Noise Control Administration Unit 9.1. The Terms of Reference (TOR) states the following for the intended Noise Impact Assessment (NIA) under Section 11.4.3 of the Draft Scoping Report: • Identify the noise-sensitive receptors, such as schools, hospitals, places of worship, etc. in the area that may be affected; • Use the Integrated Noise Model (INM) that is developed by the Federal Aviation Administration, as defined in SANS 10117, to determine and map the future noise contours (representing average and maximum noise levels) associated with the proposed runway; • Assess the impacts of noise on surrounding communities and the environment using the prescribed impact assessment methodology; • Consider, and where required, assess the impacts of vibrations associated with the construction and operations phases of the development;	8.2.8. Noted the content will be communicated to the specialist 8.3. Noted 8.4. Noted 9. 9.1. L • Noted • Noted • Noted • Noted

		• Identify and describe potential cumulative impacts resulting from the proposed project in relation to proposed and existing developments in the surrounding area; • Recommend practicable mitigation measures to minimise/reduce impacts and enhance benefits. • Assess the effectiveness of proposed mitigation measures using the prescribed impact assessment methodology; and • Recommend and draft a monitoring campaign to ensure the correct implementation and adequacy of recommenced mitigation and management measures, if applicable. The above TOR is accepted as the required scope of a NIA for a development of this nature. As such, the scope for the forthcoming NIA is deemed acceptable. The following concerns are to be assessed and addressed in the NIA. 9.2. The noise impact on existing settlements (Mikpunt, Mellish, Klipheuwel and Fisantekraal) in close proximity to the CWA site, as well as to the approved and future residential development eminent, in light of current land ownership. 9.3. Land to the south of the CWA site, which may be developed into an expansive residential district, and the Bella Riva residential development to the north of the CWA site. 9.4. The NIA must comprehensively provide detail on the noise impact and mitigating measures. 10. Water and Sanitation: Technical Services - Water Demand Management Branch The following updated overview of the sewer network and bulk services affected and technical requirements to be implemented was provided by the Water Demand Management Branch, based on the City of Cape Town master plan model.	• Noted • Noted • Noted • Noted Noted 9.2. The comment is noted. 9.3. Noted 9.4. Noted 10. Noted

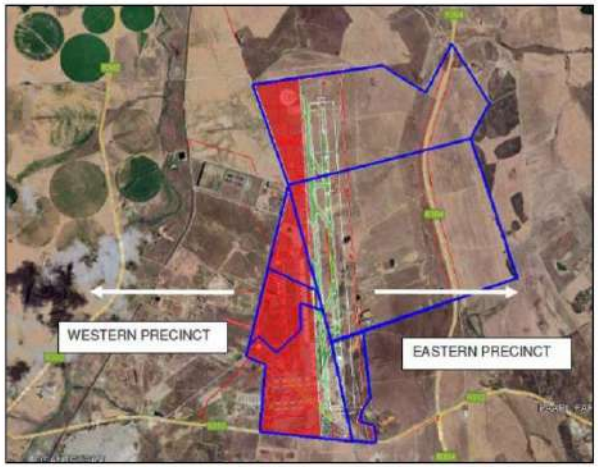


Figure 4: Locality map showing the development being reported on (Western Precinct)

Water Demand Calculations							
	Description	Units	PAL 1A Demand	PAL 1B Demand	PAL 2 Demand	PAL 3 Demand	PAL 4 Demand
Peak Water Demand Calculations	Total AADD	Kℓ/day	372.32	426.84	496.37	781.97	844.77
	Instantaneous demand	ℓ/s	4.31	4.94	5.75	9.05	9.78
	Peak Factor (PF)		3.30	3.30	3.30	3.30	3.30
	Peak instantaneous demand (Qp) AADD x PF	ℓ/s	14.22	16.30	18.96	29.87	32.27
	Consider 15% losses	ℓ/s	2.13	2.45	2.84	4.48	4.84
	Peak Fire Flow (Qf)	ℓ/s	215.00	215.00	215.00	215.00	215.00
	Total Peak Instantaneous Demand (Q) Qp + Qf	**ℓ/s**	**231.35**	**233.75**	**236.80**	**249.35**	**252.11**

Table 1: Water demands as provided by the consultant.

Water Reticulation Drainage area

10.1. The site falls within the Spes Bona Reservoir supply zone. There are no existing municipal potable pipelines in close proximity to the site.

Present situation

10.2. The site is not currently serviced by a municipal water connection. The existing buildings on site are serviced through boreholes. An existing

10.1. Noted. The Bulk Services report indicates a proposal to extend the municipal network to CWA.

10.2. Noted. The Bulk Services report indicates a proposal to extend the municipal network to CWA.

		water reticulation main supplies the chicken farms to the west of the Cape Winelands Airport (CWA) development. The closest accessible existing municipal water service is located in the Fisantekraal settlement. 10.3. A modelling exercise previously done to determine if connection to the 450mm Ø water main in the R312 (Klipheuwel Road) just after Okavango Road was able to supply the proposed development. The results concluded that at best (especially now with the higher water demand) it only had the capacity to supply approximately 25% of the AADD (i.e. 5.63l/s). 10.4. It is noted that the applicant is exploring alternative water sources to meet the developments water requirements. From the Phased water supply plan below (extracted from Figure 38 on page 173 of the DSR) the applicant will be utilising boreholes water for the initial phase of the development. Water will be treated to the required standards and used as potable water. The applicant must engage with Water Pollution Control (Shahied Solomon: Shahied.Solomon@capetown.gov.za) as the water usage needs to be registered as a Water Service Intermediary (WSI). There is expectation that in the long term for the full development there will be access to an augmented Bulk Supply via Muldersvlei	10.3. Noted. CWA water supply strategy consists of a combination of the current water supply potential described in 10.3, groundwater as well as supply from a proposed Bulk Supply main. 10.4. Noted. Zutari will engage with Water Pollution Control to obtain the necessary WSI. The acknowledgement of the supply from Muldersvlei is noted.

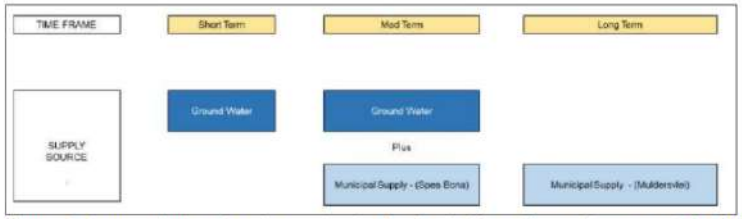


Figure 5: Proposed phased water supply plan (extracted from Figure 38 on page 173 of the DSR)

Sewage Flow Calculations							
Land use	**Average Dry Weather Flow (ADWF)**	**Unit**	**PAL 1A**	**PAL 1B**	**PAL 2**	**PAL 3**	**PAL 4**
Warehousing	Based on 80% of Water use	KL/day	2.774398	2.774398	7.631996	7.631998	7.6319964
Hotel	Based on 80% of Water use	KL/day	86.4	86.4	86.4	86.4	86.4
Commercial	Based on 80% of Water use	KL/day	147.8492	184.2592	194.5139	418.0619	466.01223
Hangers	Based on 80% of Water use	KL/day	7.448	8.456	11.312	13.272	15.568
Residential	Based on 80% of Water use	KL/day	1.617	1.617	1.617	1.617	1.617
Wash Ficility	Based on 80% of Water use	KL/day	20	20	20	20	20
Gate House	Based on 80% of Water use	KL/day	0.576	0.576	0.864	0.864	0.864
Club House	Based on 80% of Water use	KL/day	0.65997	0.65997	1.47597	1.47597	1.4759704
Total ADWF		**Kℓ/day**	**267.32**	**304.74**	**323.81**	**549.32**	**599.57**
Instantaneous demand		ℓ/s	3.09	3.53	3.75	6.36	6.94
Avg Peak Factor		-	Varies	Varies	Varies	Varies	Varies
Peak Dry Weather Flow (PDWF)		**ℓ/s**	**4.99**	**5.60**	**6.00**	**9.65**	**10.46**
Infiltration @ 15%		ℓ/s	0.75	0.84	0.90	1.45	1.57
Peak Wet Weather Flow (PWWF)		**ℓ/s**	**5.74**	**6.44**	**6.90**	**11.10**	**12.03**

Table 2: Sewer flows as provided by the consultant.

Sewer Reticulation

Drainage area

10.5. The proposed development at present does not fall within an existing catchment area, but any new sanitation infrastructure that is installed will drain to the Fisantekraal Wastewater Treatment Works (WwTW).

Present situation

10.5. Noted

		10.6. The current GIS records shows that the site is located on the urban edge and thus sewage services provision in close proximity to the site is limited and existing services are located quite far from the site.	10.6. Noted. CWA is proposing new link infrastructure to service the site
		10.7. The nearest existing services are located in Fisantekraal. Based on the information received, the applicant has decided to consider two options:	10.7. Noted
		10.7.1. Option 1: Construction of pump station and associated rising main to pump sewage to Fisantekraal WwTW	10.7.1. Correct
		10.7.2. Option 2: Construction of an on-site packaged sewage treatment plant to treat sewage on site.	10.7.2. Correct
		10.8. Option 1 is possible as the Fisantekraal WwTW has sufficient capacity to treat the proposed effluent produced from the development. The Standard Operating Procedure for Treatment Package Plants are applicable to developments situated in the constrained catchments, but has also been allowed when there is a network constraint (affecting a proposed development). Further engagement with the City's Water and Sanitation officials (Water Pollution Control) will be required in order for a Package plant to be registered.	10.8. Noted

		 Figure 6: Water (blue line) and Sewer (red line) layout Bulk Water 10.9. No bulk water pipelines or infrastructure under the control of the City of Cape Town's Bulk Water Branch exists in the immediate vicinity of the subject properties. 10.10. The Bulk Water Branch will have to comment as the long-term supply to the CWA is expected to come via the augmented BW system. There are no Bulkwater ground water schemes located in the vicinity of the development. The applicant is required to obtain the necessary authorisations to abstract groundwater from Department of Water and Sanitation (DWS). Water Pollution Control 10.11. Should the applicant discharge to the Fisantekraal WWTW, the following will be applicable:	10.9. Noted. CWA understands that this statement is made to indicate that the proposed development does not impact on Bulk Water's infrastructure. 10.10. Noted. (1) CWA acknowledges that the Bulk Water branch will have to comment on augmenting the water supply from the Bulk Water system. (2) CWA will apply for the necessary authorizations to abstract groundwater. 10.11.

		10.11.1. Any company producing industrial effluent (laundry, restaurant; butcher etc.) should comply with the Wastewater and Industrial Effluent By-Law, 2014 and the Bylaw relating to Storm water management: Companies should pay special attention to the following points with regards to the Wastewater By-Law:	10.11.1. The requirements and bylaws are noted and will be complied with where applicable.
		10.11.1.1. An Industrial Effluent Permit is to be applied for;	10.11.1.1. Noted
		10.11.1.2. A sampling chamber is required where the final industrial effluent can be sampled before it mixes with domestic waste;	10.11.1.2. Noted
		10.11.1.3. Industrial Effluent needs to pass through a suitable treatment facility before it is allowed to be discharged to the sewer; and	10.11.1.3. Noted
		10.11.1.4. No cross connections between storm water and wastewater.	10.11.1.4. Noted
		10.12. Should the development discharge industrial effluent into the sewer system, the Water Pollution Control Unit must be contacted. The relevant official is Thembakazi Gobodo (Thembakazi.gobodo@capetown.gov.za and 021 400 3320).	10.12. The contact provided is noted.
		Wastewater	
		10.13. The proposed development falls within the catchment of Fisantekraal Wastewater Treatment Plant. The Wastewater Branch confirms that there is currently sufficient unallocated spare capacity at the Fisantekraal WWTW to accommodate the proposed 599.57 kl/d sewer flow discharged from this development.	10.13. Noted
		10.14. The option of installing a package plant is available should the developer wish to install one to accommodate the anticipated discharge. The following officials is to be contacted regarding the required process for approval for a private wastewater treatment package plant: Caashief Adams (Caashief.Adams@capetown.gov.za) and Shahied Solomon (Shahied.Solomon@capetown.gov.za).	10.14. Noted
		Conclusion	

		10.15. There is limited capacity in both the existing water and sewer networks to accommodate the proposed development. Based on the engineering service report, boreholes are proposed to be used for potable water supply but its impact must be assessed by the Bulk Water Branch. The intention to make extensive use of treated effluent does make Option 2 with onsite treatment a desirable solution.	10.15. Noted
		10.16. The applicant should be cognisant of the other large proposed developments in the vicinity, such as Bella Riva and Greenville Garden Cities development when planning the water and sewer infrastructure requirements.	10.16. Noted - dialogue bewteen CWA and these developments is underway
		Water and Sanitation Directorate related Conditions	
		10.17. The Water and Sanitation Department indicated that the following conditions are to be met:	10.17.
		10.17.1. Development Contributions may be payable as per the City's Development Contributions Policy.	10.17.1. Noted - this is a standard condition of approval.
		10.17.2. The developer will be responsible for payment of Development Contributions applicable to sewer and water services, before transfer of individual erven will be allowed.	10.17.2. Noted - this is a standard condition of approval.
		10.17.3. All engagements with the City officials as indicated above need to occur timeously.	10.17.3. Noted - this is a standard condition of approval.
		Additional Technical Requirements	
		10.18. The water and sewer capacities allocated according to this comment must not be reserved if not taken up before the lesser of 5 years or the approved development period.	10.18. Noted - this is a standard condition of approval.
		10.19. Water and Sanitation municipal service designs to be designed according to Departmental Service Standards and be approved prior to construction. These standards can be obtained on the City of Cape Town website.	10.19. Noted - this is a standard condition of approval.
		10.20. The applicant must advise the Water and Sanitation Directorate when all conditions have been complied with, in order to have the work inspected.	10.20. Noted - this is a standard condition of approval.

		10.21. The owner is responsible for application for the new water metered connection at the standard tariff to the Reticulation District Head. If an existing water meter is not accessible, this will include for the repositioning of the meter. **General/ Disclaimer** Information provided is based on best available data. The infrastructure as-built information referred to and used in the hydraulic models are based on the GIS asset records, while modelled pressures, flows, velocities, capacities and volumes are based on hydraulic models of current land use and demands. Where appropriate, future land use and demands are considered and the impact of a development compared to that currently planned for the same land and surroundings. 11. Water and Sanitation: Catchment, Stormwater and River Management Branch 11.1. The Catchment, Stormwater and River Management Branch previous comments have been captured and responded to in the Comments and Responses Report and remains applicable. The impact on catchments and stormwater will be addressed in the forthcoming required Stormwater Management Master Plan. Additional comment to previous comments provided: 11.2. Page 178 of the DSR states: "A portion of the treated effluent will be disposed of on site." It is not clear in the report how this will be achieved. 11.3. Figure 34 of Appendix 8: Freshwater Ecological Report reflects a seep wetland that has been deemed a no-go area however; it is within the development area. This conflicting information is to be corrected. 12. Spatial Planning and Environment: Environmental Management Department The Environmental Management Department's comments have been captured and responded to in the Comments and Responses Report. It is noted that the concerns regarding the on-site Critical Biodiversity Areas and other environmental and heritage impacts will be addressed in the forthcoming environmental (terrestrial, faunal, avifaunal, freshwater), heritage specialist and offset reports. As such, the scope for the forthcoming environmental and	10.21. Noted - this is a standard condition of approval. 11. 11.1. Noted - A SWMP will be prepared and submitted. 11.2. The information will be provided in report revision. 11.3. Response from specialist: The freshwater report stipulates that an area of 6.74 ha of seep wetland will be lost as a result of the proposed CWA development. The freshwater report further states that the remainder of the wetland is to be deemed a no-go area. The same applies to the CVB wetlands further north of the seep wetland, where development will not occur. 12. Noted

		offset reports is deemed acceptable. Herewith supplementary and additional comment: Environmental Potential botanical impacts (Page 354 of the DSR) 12.1. The Biodiversity Management Branch has had preliminary discussions with Mr. Marc Botha, the appointed terrestrial biodiversity offset specialist, around securing an appropriate terrestrial offset. 12.2. The remnants that remain and that will not be affected by the development (on site set-aside) must be cleared of alien vegetation now using best practise methodology as per the DEA&DP Directive issued in December 2021 ensuring no further loss of Critically Endangered plant populations. 12.2.1. These remnants will need a conservation status protecting it from future development aspirations, a clearly defined boundary, and to be managed as a conservation area to ensure the continued survival of these species. 12.2.2. These areas must also be physically demarcated as No-Go areas before any development takes place. 12.2.3. Effort should be made to reintroduce Leucadendron grandiflorum (Endangered) which was lost during the alien clearing activities and restore additional patches of Leucadendron verticillatum (Critically Endangered), which was also heavily impacted on during the alien clearing process. The above mitigation measures are to be included in the forthcoming EMPr. 12.3. Any populations of indigenous species within the development footprint must be Search and Rescued and reintroduced on site within the set-aside or offset areas. This must be included in the forthcoming EMPr. Freshwater and terrestrial offsets (Page 409 of the DSR) 12.4. The Biodiversity Management Branch has had preliminary discussions with Mrs Bianca Bleuler of FEN Consulting, the appointed wetlands offset	12.1. Noted 12.2. An alien vegetation management plan will be included in the EMPr. 12.2.1. Noted 12.2.2. To be included in EMPr 12.2.3. Noted 12.3. Noted 12.4. Response from specialist: CWA is committed to conserve the rehabilitated wetlands (portion of the CVB wetland and remaining seep

		specialist, regarding the on-site rehabilitation of a channelled valley bottom (CVB) wetland of the Klapmuts River. The on-site rehabilitation of the CVB wetland is tentatively supported, provided that the site is assigned an appropriate conservation status and managed as a conservation area protecting the integrity of the rehabilitated system and buffered from outside influences, especially agricultural activities. This must be included in the forthcoming EMPr. Forthcoming Construction and Operational Environmental Management Programme (CEMPr and OEMPr) The previous comments are re-iterated regarding the forthcoming CEMPr and OEMPr: 12.5. The CEMPr is to include full details on the proposed search and rescue operation (as recommended by the botanical specialist). 12.6. The OEMPr is to include the following: 12.6.1. The Wildlife Management Plan (as recommended by the faunal specialist). 12.6.2. An alien and invasive species management plan for the ongoing maintenance of invasive alien species. Heritage 12.7. Previous comment on the Heritage Baseline Study and Scoping Report by Aikman Associates remains applicable and the recommendation for the need for a Heritage Impact Assessment in terms of Section 38(3) of the National Heritage Resources Act (NHRA) to assess the potential impacts on the cultural landscape and the potential significance of the site is deemed acceptable. Signage 12.8. The newly promulgated Outdoor Advertising By-Law No.8969 of 2023 (the By-law) has repealed the Outdoor Advertising and Signage By-Law 10518 of 2001 to regulate the use of land and buildings for outdoor advertising and signage.	wetland) and ensure the integrity of the systems are maintained, and improved. 12.5. Noted 12.6. 12.6.1. Noted 12.6.2. Noted 12.7. A Heritage Impact Assessment will be submitted to HWC. 12.8. The legislation in the Scoping report has been updated. The Outdoor Advertising Guideline (Appendix 32) will be updated for the EIA Phase.

		12.8.1. Proposed signs are to be omitted on the Site Development Plan (SDP) drawings and the Outdoor Advertising Guideline must be amended to encompass the requirements of the new By-law. 12.9. A signage master plan application must be submitted directly to the Environmental Management Department for consideration. 13. SUMMARY 13.1. Although an extensive list of possible impacts have been identified, the current specialist reports require additional assessment and aspects to be evaluated more comprehensively. Herewith a summation of potential impacts and shortcomings as highlighted by the technical Departments above The abovementioned City of Cape Town comment must be addressed and included in the Final Scoping Report. The Final Scoping Report and final correspondence from the Competent Authority must kindly be submitted to the City of Cape Town for	12.8.1. Response from specialist: The Revised Appendix 32 will not include proposed advertising signs. The Outdoor Advertising Guideline to be amended accordingly to encompass the newly promulgated by-law No. 8969. 12.9. Noted 13. The summary is noted. Responses are provided above. Noted

Alternatives	Lack of alternatives as currently only 2 alternatives presented - the preferred alternative (end state) and the no-go alternative. This does not satisfy the regulatory requirement for the evaluation of alternatives in terms of NEMA. The lack of information regarding a phased approach for the proposed expansion needs to be addressed.
Need and Desirability	The need and desirability of the proposed CWA within the regional context of the Western Cape, including a consideration of George Airport together with CTIA, has not been adequately addressed in the DSR.
Botanical impact	Loss of indigenous vegetation to be addressed in the forthcoming Terrestrial Offset Report.
Freshwater impact	Loss of wetlands to be addressed in the forthcoming Freshwater Offset Report.
Avifaunal impact	Forthcoming Airport Bird Hazard Management Study to address potential bird strike impacts. The assessments are to address the phases approach up until and including the end state.
Noise impact	The baseline report only measures current noise levels. The forthcoming Noise Impact Assessment needs to address the increase of noise, the growth of noise contours and the associated effect on the existing surrounding land uses, existing settlements and approved rights, as well as measure the impact of the airport expansion and the further activities and uses on the surrounding environment. The assessment is to address the phases approach up until and including the end state.
Air quality impact	Further emission assessments are required in the forthcoming Atmospheric Impact Report.
Socio-economic impact	The current Socio-economic scoping report refers to outdated City economic strategies and does not provide economic analysis of the likely impact that the expansion of the CWA will have on the regional economy. Forthcoming reports are to include quantifiable estimates and assess potential risks of expanded informality in the area. The assessments are to address the phases approach up until and including the end state.

		record purposes and to ensure that the City of Cape Town's comments are sufficiently addressed.	
247	George Zondagh - Director Ag-Sprayers	*Email dated 27 August 2024:* 1. I have spoken to Michael Orsmond of WP Oes Cropspraying. I would like to register as an interest party in the airspace utilisation part of Cape Winelands development. Ag-Sprayers do regular airwork in the area North of Fisantekraal and Malmesbury.	*Email response provided 28 August 2024:* 1. Thank you for the email. You will be registered as an I&AP for the proposed project
248	Guy Gibbon	*Email dated 28 August 2024:* 1. Did you get any other feedback on the review period? Will you be putting a list of statements together for our perusal? We have a team ready to assist with whatever you believe to be important to proceed to the next phase?	*Email response provided 28 August 2024:* 1. You have been registered as an I&AP for the proposed project. The in-process Scoping public participation closed on 26 August. Please note further communication with registered I&APs will be during the Impact Assessment Phase of the proposed project, during which time comment on the IR and supporting documentation will be requested.
249	Francois Naude – Udec Engineering	*Email dated 28 August 2024:* *1. Thank you for your reply.* I do believe you have Mr Hersov's mail address, and I respect your right to not give it to anyone. I want you to reconsider my request on this. I'm following the private professional way of getting a private letter to him addressing some concerns. You are employed by him to handle this maters , and I'm following the correct route to get in contact with him. I could go the open letter route on the various platforms available. At this moment I'm giving him the opportunity to have a conversation between 2 professional gentlemen. *Email reply dated 29 August 2024:*	*Email response provided 28 August 2024:* 1. Unfortunately, I do not have Mr Hersov's contact details. Rob Hersov ended his involvement with Cape Winelands Airport in all capacities. He stepped down as a director of Cape Winelands Airport in March 2023. The departure signified a full and complete disassociation from the airport's operations, management and shareholding. I have copied Deidre Davids in this email to further assist you with your query. *Email response provided 29 Augst 2024:*

		2. Thank you for the reply. It is general knowledge that he is the main investor in the airport. He said it himself on TV. Is he still and investor. And then please then who is the actual owners and directors now and how can I contact them.	2. I have copied in Deon Cloete in this email – he is the Executive Managing Director. He will be able to answer your queries.
250	Carli Costa	*Email dated 31 August 2024:* 1. Could I please register as an I&AP for the expansion of the Cape Winelands airport.	*Email response provided 1 September 2024:* 1. Thank you for the email. You will be registered as I&AP for the proposed project.
251	Barend du Preez - Transport Infrastructure Branch, Department of Infrastructure, Western Cape Government	*Email dated 5 September 2024:* 1. I hope this email finds you well. Due to our new database system for applications, I missed the deadline for submitting comments. Is there still an opportunity to provide feedback, or will there be more chances to comment in the future?	*Email response provided 6 September 2024:* 1. Thank you for the email. The public participation period for the in-process Scoping Phase ran from 24 July to 26 August 2024, but further opportunity for comment will be within the Impact Assessment Phase later this year. As a registered I&AP you will be notified when this commenting period starts.
252	Lourens de Bruyn	*Email dated 5 September 2024:* 1. Your email is given as a contact person regarding the Winelands Airport Impact. How can I find out what the proposed flight path is for landings and departures to and from this airport? What towns will have aircraft overhead due to this development? *Email reply dated 5 September 2024:* 2. Please note that no one consulted the inhabitants of Wellington regarding this project.	*Email response provided 5 September 2024:* 1. Thank you for the email. Please refer to the in-process Scoping report and supporting documentation on our website at download link https://phsconsulting.co.za/proposed-expansion-of-cape-winelands-airport/. Please note the period for commenting on the in-process Scoping report was between 24 July and 26 August 2024. You will be registered as an I&AP for the proposed project and notified of the next available round of public participation within the Impact Assessment Phase. *Email response provided 6 September 2024:* 2. Thank you for the comments regarding flights from and to CTIA.

		None of the relevant seeming appendixes seems to Address my question. Appendix 5, Appendix 17 and Appendix 28 was perused. I would assume that some air traffic control authority determines the approach and departure flight plans. 2 Somewhere since 1999 the approach to Cape Town International changed, re-routing flights over Wellington. This had a marked increase in noise over the area. Especially as the noise of the aircraft becomes suddenly louder as the pilot seems to shed speed on approach to Cape town. No one consulted anyone in the affected areas. I therefore ask the question again: What is the determined flight path after the aircraft leaves the airport and before it lands. Aircraft do not "just appear" out of nowhere nest to the airport. It is not so difficult. Give us a flight plan to within say 300 km from the airport. Somewhere there has to be a diagram for this. It just do not appear to be in your documentation. We cannot comment if you do not document. *Email reply dated 10 September 2024:* 3. Thank you for the feedback. *Email reply dated 22 October 2024:* 4. When later this year will be later this year? 2024 is seriously running out of sand.	The proposed project is within the Scoping Phase at present, with Impact Assessment to commence later in the year. Airspace planning and flight paths determination / design is still in process. Responses to your queries will be answered in the next round of public consultation. As a registered I&AP you will be notified when this comment period starts and provided with the opportunity to comment on the proposed project. Response from EAP: Please note this project concerns the expansion of the existing Cape Winelands Airport. The flight paths for Cape Town International does not form part of the scope of this project. Proposed flight paths for CWA are included in APPENDIX 22: Visualization of FACT and FAWN combined operations to the IAR.
253	Terry Gal - Exporters Western Cape	*Email dated 6 September 2024:* 1. Trust this finds you well. Nick Ferguson, ric, has requested that I forward the attached letter of support for this is to be registered. Many thanks.	*Email response provided 6 September 2024:* 1. Thank you for the email and the letter. We will capture the contents and also register you as an I&AP for the proposed project.

		Letter reived via email dated 6 September 2024: 2. It gives me great pleasure to support and endorse the establishment of the new Cape Winelands Airport (CAW) on the old Fisantekraal Airfield in Durbanville. In view of the potential growth of the export industry, not only with reference to the implementation of the AfCFTA, which CWA can be a major conduit for trade into Africa, CWA can become an air cargo hub, ideally situated close to the N7 and the Atlantis Industrial Area, plus there is a rail link for ease of access, and if Dube Tradeport can do it, we can as well! As the port struggles with inefficiencies, exporters and importers are turning more to airfreight to ensure the cargo moves and to meet deadlines. We also take cognisance of CWA working in collaboration with CTIA, when CTIA goes fogbound and flights to be rerouted, with CWA only 20km away, and not affected by coastal fog, flights can be diverted to CWA. This is not even taking into account the safety aspect of having an alternate option to CTIA, as we have witnessed in the past when the main airport has been closed due to protest action, we will have another option. Another International Airport will add more job opportunities and from a Global perspective, most major cities have 2 International Airports nowadays as air travel becomes more competitive and more international carriers want to fly to our awesome.City.	
254	Ross	*Email dated 5 September 2024:* 1. I'm not sure if you are the right person to be contacted, but I did a bit of research on flight paths, flight altitudes and airport economic effects in the area. A typical commercial airliner starts to descend 30km from an airport traveling from 10km in altitude (the hypotenuse angle) giving it a 20km baseline distance from the airport. at around 10km, the altitude drops to 6km and at 6km, the dB noise level is around 60dB. The average home is around 45dB, and	*Email response provided 6 September 2024:* 1. Thank you for the email. Your comments will be recorded, and you will be registered as an I&AP for the proposed project. EAP response:

		Durbanville (Avalon estate) is only 7km away from AND in the direct path of the runway ANGLE. https://www.youtube.com/watch?v=ETWxhp6KK3A Please include this video or something similar in your overall assessment of the area if you can please! 2. In terms of economic impact, the amount of informal settlements that will rock up because of employment opportunities, which increases crime rates, as well as noise and environmental pollution is also a concern. 3. Even airport sound-dampening designs have very little impact on noise and air-pollution: https://youtube.com/shorts/SWVrsY2OSMQ?si=B0AXIQ_qmN8HOERE Only a 5dB reduction, still makes it incredibly noisy and disturbing. Please help all residents of Paarl, and Durbanville fight to keep this airport from expanding into an international airport. *Email reply dated 8 September 2024:* 4. That's great, thank you very much Amanda!	The economic impacts for the proposed project have been considered by the Socio-economist and is included in APPENDIX 24: Socio-economic Impact Assessment Report for consideration by IAPs. The noise and air quality impacts for the proposed project have been considered by the relevant specialist and are included in APPENDIX 5: Noise Impact Assessment Report and APPENDIX 4: Air Quality Impact Assessment Report for consideration by IAPs.
255	Lozaan Burger – Mikpunt Resident	*Email dated 6 September 2024:* 1. I would like to comment and be added as a I&AP. The pen is mightier than the sword… This is the reason I am putting my situation in writing; all I am asking is please read this so you will have a better understanding off the impact the airport will have on my parrot sanctuary and the lives of 147 parrots. 2. General Information: My general concerns about the above expansion are the noise and big effect this will have on my property value. Also, the cost of building new parrot rooms/aviaries and moving 147 parrots will be too expensive.	*Email response provided 6 September 2024:* 1. Thank you for the email. The comments will be recorded, and you will be registered as an I&AP for the proposed project. Responses to your queries will be answered in the next round of public consultation. As a registered I&AP you will be notified when this comment period starts and provided with the opportunity to comment on the proposed project. *EAP response:*

		We bought this small holding 8 years ago. We bought this property, because of the silence, the nature, the farm atmosphere. We run a non-profitable parrot sanctuary at our property. We have three big parrot aviaries. One parrot room of 120 square meter, we built this room 4 years ago. Especially for the needs of the nine macaw parrots. Our house is also converted to cater for stressed parrots. The last 8 years we spend thousands of rands to make this our safe, peaceful forever home. 3. What is the sanctuary about? The sanctuary is all about peace and harmony for birds. I run the sanctuary at my own cost, from my home in Mikpunt. This is not a sanctuary which is open to public, no visitors are allowed. I does not do this to exhibit these birds, I takes them to love and provide good lives for them. Most off these parrots are already traumatised by the time they end up with me. I take old, cripple, neglected birds in. When people immigrate and cannot take their birds, I will give them a forever home. I also do not adopt "out" birds, they stay with me forever. 4. Parrot facts: • Parrots react to the appearance of airplanes with a marked increase in heart rate, in other words they become nervous. • Airplanes can also prompt birds to take flight. They see an airplane as a predator. This is when they hurt themselves. Flying into the fence a wall, breaking a wing, sometimes even the neck…fatal accidents • Currently we experience this only one a year, with the crop sprayer aircraft.	The noise impacts for the proposed project have been considered by the relevant specialist and are included in APPENDIX 5: Noise Impact Assessment Report for consideration by IAPs.

		• Loud noise from aeroplanes landing and taking off causes birds to become more aggressive and potentially impairs their hearing. • Parrots Have a Remarkably Long Lifespan. ... the larger parrots, like macaws and grey parrots, can live 25–75 years. Well, with a parrot sanctuary, where most of the parrots are "stressed", the airport is big NO-NO for us. We put a lot of money into our place because it would be our "forever home". It is sad to have to leave your "forever home" due to matters beyond your control. I do not even think we are going to get our price for the house's sale, for everything we put in. Any property we buy, we will have to build new aviaries and rooms for the parrots. This is not thousands, but hundreds of thousand rands. Too expensive for us. Then we need to relocate 147 parrots. This means we need to get the help of an avian vet. Now we are talking a lot of money… How many parrot lives will we lost in the relocation??? Many of them will not be able to take the stress. But yes, most people will think, o it is just a parrot! For me this is the sad reality of the new Winelands airport!! 5. From the above I need to ask you the following: 5.1. Have PHS consulting, the developers and all contracted professionals contracted to do all feasibility and environmental studies have realised/or have been briefed, that off all affected areas MIKPUNT will be affected the most. 5.2. Can PHS please motivate why a public meeting in MIKPUNT have not been organised based on the assumption/fact that this will be the most affected area.	5.1 The comment is noted. The proposed project requires authorisation in terms of NEMA and is currently in Impact Assessment Phase. All registered IAPs will have the opportunity to consider the various specialist impact assessment reports and technical reports and provide comment. 5.2 A public meeting was held in Fisantekraal during the Pre-application Scoping Phase. An Open day is planned on 20 November 2024 during the Impact Assessment Phase at a central location for all IAPs (Goedgeleven Estate). During the open day IAPs will have an opportunity to interact with

		5.3. Property values will in general rise with development, but in MIKPUNT's case it might very easily decline. People want to live near the airport but not touching distance from the runway. What guarantees can the developers give MIKPUNT property owners that they will not lose value. Are there steps in place should this happen. I await your prompt response to my concerns. *Email reply dated 6 September 2024:* 6. Thank you so much.	technical staff and specialists in order to obtain more information regarding the proposed project. 5.3 The economic impacts for the proposed project have been considered by the Socio-economist and is included in APPENDIX 24: Socio-economic Impact Assessment Report for consideration by IAPs.
256	Larry Eichstadt - Nerina Resident & Environmental Consultant	*Email from IAP to CoCT Ward 112 dated 9 September 2024:* 1. I have received an information mail re the Winelands Airport. It would be appreciated if you could clarify why the "Politicians" are already marketing the new Airport when the respective Environmental and Town Planning processes are far from complete. The current approach is potentially in direct conflict with the need for the respective CoCT departments to make informed independent decisions based on the factual outcomes of the reports which still have to be prepared without political interference. *Email reply from IAP to CoCT dated 10 September 2024:* 2. Political interference in the EIA process is quite clear - according to these statements. New Cape Town airport: Which flights will operate there? The Cape Winelands Airport, located in Durbanville, will begin offering local and international flights in 2027. These 2 statements clearly show that the outcome of the various legal processes is just seen by the Politicians as a tick box exercise !!	*Email response from CoCT Ward 112 to IAP dated 10 September 2024:* 1. Thank you for your mail. This office strive to keep the community informed on city news. I herewith put you in touch with the Sub Council 7 Administration, who will either escalate or have more information on the subject. Trust you find it in order. Email response provided from EAP dated 11 September 2024: Thank you for the email.

257	Francois Naude - Udec Engineering	*Email from IAP to CWA dated 11 September 2024:* 1. I hope that you will read this e-mail and care to reply. But let's hope the airport and its people are as good as it is presented in the media. I'm a resident of MIKPUNT and have followed the airport development closely. Let's make it clear that I'm not against the development or trying to stop it in any way. Yet. I understand that it's for the greater good of the region etc. Unfortunately for the residents of MIKPUNT which is very near to the airport and more importantly more or less directly under the runway, this development will have a huge impact on their lives and the place they call home. Please remember that we stay there because we don't want to stay in town. The rural environment, peace and quiet is the most important factors of staying there. Your airport will alter this drastically. I'm in the engineering profession and like to work with facts rather than emotion. I went and plotted a GPS point between the end of Cape Town international runway and the location of my house compared to Cape winelands airport. I went to that point, and it is beyond noisy. This was with airplanes landing and not taking off in that direction. When I read your PHS Consulting studies and look at the noise zoning aspects, MIKPUNT should be re-zoned to industrial according to COGT laws. As in my reply to the public participation via PHS, I do feel that you know very well MIKPUNT will be the big losers in your development. So far, according to what I can observe you tiptoe around this issue. All maps stopping short of MIKPUNT, no meetings in MIKPUNT etc. At this point, please feel free to correct me on any point I have mentioned so far. I want you to put yourself in my shoes. I have worked hard , bought the plot cash, and build my house with my own hands, also cash. At this moment, a portion is finish and I'm at the point of investing more money to continue the build. I have a few chickens, a very good veggie garden and then the rural peace and quiet I have mentioned before. Would you exchange that for living 2500m direct inline from and international airport runway with you freight and passenger estimates. I can answer that for you. No, you won't.	*Email response from CWA to IAP dated 15 September 2024:* 1. Thank you for your email and attached letter sent to PHS in August, my apologies for the somewhat belated response. Maybe as a point of departure, please be assured that we are aware of Mikpunt as one of the current residential communities in the area, as is the case with Fisantekraal and Klipheuwel. To date we have had only one public meeting, that being in Fisantekraal, it happened during our pre-application phase and it was a meeting open to, and attended by anyone that wished to do so. As for the impact on Mikpunt, in terms of process, to date we have only been in the pre-application and scoping phase of our EIA application, we are now entering the impact stage where all impacts, including noise will be assessed and shared with the public and surrounding communities. It is only when the noise specialists have concluded their work that we will have a true and accurate understanding of the impact, on any or some of the surrounding communities, or if at all. The studies will then allow for informed and constructive engagements with interested and affected parties, until then Francois any other conversations will be premature. During this time we are also planning an open day at the airport, where we will in person share our plans and both the development team as well as the specialist consultants will be available to provide insights and respond to questions, inputs or suggestions. Francois I hope that you will be able to take up the invitation and join us on that day, the date and time will be communicated in due course. In copy I have placed Amanda from PHS for her awareness of our email exchanges and correspondence. Thank you again for reaching out Francois, I trust that you will find this in order, we are looking forward to meeting and engaging you further at the open day. *Email response from EAP to IAP dated 16 September 2024:*

		So, I'm left with 2 options. Either I take on the David vs Goliath fight with the airport and become the torn in your flesh, or I relocate further from town. Option 2 seems the more practical option for both of us. If you are a good and decent human being and Cape Wineland Airport want to portray themselves as good for all, then please buy my house and enable me to go elsewhere to continue my standard of living. I'm very sure that with all the good things that's going to happen with the development, owning a piece of land so nearby at this stage will pay dividends later. I have done a professional evaluation on my house and my fair asking price is R1 800 000.00. I have also found a plot to relocate to in Malmesbury and will need to build a new house from scratch again with my own hands. You will realise I need to make life changing decisions so can we call it fair to expect an response to this mail within 3 days from sending. *Reply from IAP to CWA dated 16 September 2024:* 2. Thank you for replying on a Sunday. It is appreciated and a good start. I will attend your open day and any other meetings. I do hope this is advertised better than the one already held. Yes, perhaps the conversation is pre-mature, but we can both agree that the airport will happen. The only way Mikpunt will be acceptable to call home will be, either with the airport not happening at all, or with major changes to the current proposed runway layout. I don't need the professional noise studies to tell me in smart language the noise will be acceptable. Going to the same location at Cape town International will tell you all you need to knowas I explained in my previous e-mail. I think even yourself will make up your mind in seconds whether you want to stay there or not. I'm also having this conversation pre-mature because the options of suitable alternatives to our current lifestyle in the Cape Town area is very limited or Stellenbosch expensive. So currently I'm telling Cape Winelands airport that my HOME is currently – reluctantly – up for sale due to your plans to drastically alter the environment	1. Just note the Public Open Day will be at an accessible venue to be communicated to all I&AP's in due course.

		around it. I'm also asking you due to you ,creating the problem, to do the honourable thing to buy it.	
258	Patty Giliomee - Durbanville Municipal Offices - Subcouncil 7 (Area North)	*Email dated 19 September 2024:* 1. I trust you are well. I need your assistance or guidance please. At our Subcouncil Meeting yesterday, they Councillors asked for the contact details of the consultants for the abovementioned. Please could you let me know who's details I can forward to them?	*Email response provided 19 September 2024:* 1. Thank you for the email. PHS Consulting has been appointed as the Environmental Assessment Practitioner for the EIA process for the proposed project, so you are welcome to forward my contact details to them.
259	Rhynhardt Bresler - Councillor Ward 102 – City of Cape Town	*Email dated 27 September 2024 (In response to notification of Public Meeting held on 8 May 2024:* 1. I take note of this mail. Thanks. I was unfortunately not able to attend dew to other commitments. I am still very interested in the development of this project. Was there some minutes or feedback on this meeting.	*Email response provided 27 September 2024:* 1. Thank you for the email. Please refer to the in-process Scoping report still available for download on our website at link https://phsconsulting.co.za/proposed-expansion-of-cape-winelands-airport/ in particular Appendix 33 that contains more detail on the meeting you are referring to (Page 41 onwards). As a registered I&AP you will be notified during the NEMA process and further opportunities to comment.
260	Elizabeth Roger-Lund	*Email dated 9 October 2024:* 1. I would please like to register as an I&AP for the development of the cape winelands airport. Please let me know how to do that. *Email reply dated 9 October 2024:* 2. Thanks so much email: [redacted] phone: [redacted]	*Email response provided 9 October 2024:* 1. We can register you on your email address or if you would like to provide further contact details you are welcome to do so. You will be notified of all further opportunities for public participation for the proposed project. *Email response provided 9 October 2024:* 2. Thank you Elizabeth We will record your details in the register of I&APs
261	Craig Dearham	*Email dated 13 October 2024:*	*Email response provided 14 October 2024:*

		1. Is there any feedback, as to how far the process is for breaking ground at the Cape Winelands Airport. I am still very keen to be part of the CWA especially with regards to the Museum. If you have any updates please let me know.	*1.* Thank you for the email. The proposed project is currently in the Scoping Phase, with the EIA Phase to follow. As a registered I&AP you will be notified of the future phases and afforded the opportunity to comment.
262	Christi Germishuys	*Email dated 18 October 2024:* 1. Is dit moontlik vir my om nog te registreer as n i&ap vir Cape Winelands? *Email reply dated 18 Ocotber 2024:* 2. Thank you Amanda	*Email response provided 18 October 2024:* 1. Thank you for the email. We will register you as an I&AP for the proposed CWA project.
263	Murray van der Poll	*Email dated 23 October 2024:* 1. Hi Amanda, could you kindly add my details as an interested individual to the EIA process.	*Email response provided 23 October 2024:* 1. Thank you for the email. We will register you as an I&AP for the proposed project
264	Brandon Layman – Department of Agriculture	*Email dated 24 October 2024:* 1. Please find attach comments from the WCDoA: LUM. *Letter received via email dated 24 October 2024:* 2. Your application of July 2024 has reference. The Western Cape Department of Agriculture: Land Use Management has no objection to the proposed expansion of the Cape Winelands Airports. 3. Please note: - Kindly quote the above-mentioned reference number in any future correspondence in respect of the application. - The department reserves the right to revise initial comments and request further information based on the information received.	*Email response provided 24 October 2024:* 1. Thank you Brandon 2. This comment is noted. *3.* This comment is noted.

265	Karla Burger - Elco property developments	*Email dated 24 October 2024:* 1. The below has reference. Herewith please find updated resolutions for your records. *The following document was shared and been included along with the original documents provided as Appendix E (C237):* • *Resolutions*	*Email response provided 24 October 2024:* 1. Thank you Karla

Submissions via the Cape Winelands Airport Website			
Website No.	**Name & Presenting unit**	**Issue/ Concern**	**Response**
Deferred Submissions from Pre-Application Scoping Phase			
W188	Lulama Dyobhani - Lulu's Water wise Gardens	I would like to add business on the database	This comment is noted. Lulama Dyobhani has been registered as an IAP for the NEMA process.
W189	Regis Maniora	got my support	This comment is noted. Regis Maniora has been registered as an IAP for the NEMA process.
W190	Sibulele Landzela	I would love to be part of this organization in the near future.	This comment is noted. Sibulele Landzela has been registered as an IAP for the NEMA process.
W191	Sonika Claassen - PJ Aviation	Please keep us updated on this project. Thank you	This comment is noted. Sonika Claassen has been registered as an IAP for the NEMA process.
W192	Carlos Tavares	I support the development of this new airport	This comment is noted. Carlos Tavares has been registered as an IAP for the NEMA process.

W193	Nceba Phike	I am a Cape Town born, Black South African. I am not politically poisoned; I am fully behind this project. Borrowing a mindset of the high-speed runners or driver, look, or rather focus on where you are going, not where you don't want to go. So, just ignore these people and their noise about this development.	This comment is noted. Nceba Phike has been registered as an IAP for the NEMA process.
W194	Nomfundo Moletsane	Current airport is very close to areas where there is high level of crime. Tourists are being killed and it gives our country a bad name to the world. Hopefully my business will grow as I would like to start a business of yellow cabs and African Cuisine restuarant.	This comment is noted. Nomfundo Moletsane has been registered as an IAP for the NEMA process.
W195	Anelisa Siyibana - Waumbe Youth Development	I would like the airport to give our organisation learnership for the Youth of Fisantekraal.	This comment is noted. Anelisa Siyibana has been registered as an IAP for the NEMA process.
W196	Monde Mpumela - Millennium Support Services Pty Ltd	We are Game Changer collaborative partner who are looking to be part of this development to foster Jobs and Enterprise Supplier Development as Specialists on Sustainable Development. We are looking forward to be approached for us to add value , our target is to create 60 000 thousand jobs through entrepreneurs earning a living , we have 6 million members.	This comment is noted. Monde Mpumela has been registered as an IAP for the NEMA process.
W197	Marina Labuschagne - Value Fencing Paarl & Boland	Having a airport close by will be exactly what is needed to avoid the long drive on a dangerous N2. Definately in support of it.	This comment is noted. Marina Labuschagne has been registered as an IAP for the NEMA process.
W198	John Wilkinson	This is a great project, positive impact for job creation, tourism, infrastructure development etc.	This comment is noted. John Wilkinson has been registered as an IAP for the NEMA process.
W199	Sally Ferguson	It's going to be wonderful to see this exciting new project unfold, with an incredible team who are experienced in the aviation world. A lot of work ahead but will be worth it in the end. Not only will it be an amazing asset for Cape Town and its tourism but will create revenue that is needed by the way of job creation. Congratulations to the whole team.	This comment is noted. Sally Ferguson has been registered as an IAP for the NEMA process.

In-Process Scoping Phase [30 day commenting period commencing on 24 July 2024 and up to and inclusive of 26 August 2024]			
W200	Bruce McNicol - **Mantis**	Over the years we have developed a number of hotels in the stellenbosch area the most recent being the Hazendal Boutique Hotel. We also developed Pearl Valley Hotel and as well as Delaire. An airport close to this growing economy is the next step and necessary to facilitate further growth and economic opportunities in this country and assist and manage tourism trends into the Western Cape. The Cape Grace hotel was also recently refurbished. Onwards and upwards. Let's unite and build a better South Africa	This comment is noted. Bruce McNicol has been registered as an IAP for the NEMA process.
W201	Marisse Venter- **Plastic and Reconstructive Surgeon**	I fully support the development of this project	This comment is noted. Marisse Venter has been registered as an IAP for the NEMA process.
W202	Pete Martin - **Inner Reality Limited**	Cape Town is the gateway to Africa and is expanding at a rapid rate. The greater city's population has almost doubled since 2000 from around 2.75m to nearly 5m people now. As the city continues to expand, mainly northwards, there is a growing need for more air travel and transport to service this growth. Cape Town is also the tourism capital of South Africa and the Cape Winelands airport plans to deliver an exceptional experience, providing a draw card for high profile international travelers, which will drive more job and increase GDP per capita for the area.	This comment is noted. Pete Martin has been registered as an IAP for the NEMA process.
W203	Eric Setterberg	I support the new Cape Winelands Airport	This comment is noted. Eric Setterberg has been registered as an IAP for the NEMA process.
W204	Anthony Nash	What a fantastic project. You just need to ensure both noise and other environmental pollution is controlled and without compromising on life quality of residents, livestock, produce and wildlife in the surrounding area.	This comment is noted. Anthony Nash has been registered as an IAP for the NEMA process.
W205	Henriette Van Beek	*No comment provided*	Henriette Van Beek has been registered as an IAP for the NEMA process.

W206	Hennie Lucas - **FLAMES**	What a great idea. Will support you all the way.	This comment is noted. Hennie Lucas has been registered as an IAP for the NEMA process.
W207	Cara Smit	We are excited to follow the development of this project and wish you every success. Are there opportunities for small investors /crowd funding?	This comment is noted. Cara Smit has been registered as an IAP for the NEMA process. Thank you for your interest in investing in Cape Winelands Airport. We embrace small investors and would like to take you with us. If you would like to invest, then please email cwa.wbc@wbcapital.co.za.
W208	Tiaan Smit	Thank you for the initiative of putting this project together. I wish you every success in your endeavours.	This comment is noted. Tiaan Smit has been registered as an IAP for the NEMA process.
W209	Michelle Bartlett	I am excited to express my strong support for the Cape Winelands Airport project. This development is a pivotal step towards enhancing our region's connectivity and boosting economic growth. By facilitating better access to the Cape Winelands and surrounding areas, the airport will not only create job opportunities but also invigorate local businesses and promote tourism. I believe that the Cape Winelands Airport will serve as a cornerstone for future prosperity, connecting our community with the world and elevating our region's status as a premier destination. I am proud to be part of this transformative initiative and look forward to witnessing its positive impact on our economy and quality of life. Thank you for your dedication to making Cape Winelands Airport a reality. I am eager to see its success and the numerous benefits it will bring to our community.	This comment is noted. Michelle Bartlett has been registered as an IAP for the NEMA process.
W210	Abu bakar Heynes - **ABH Shuttle and Tours**	We as ABH Shuttle and Tours, fully registered with BEE compliance, would like to offer our service in doing airport transfers, to and from airport, we also offering to do staff transport in and out, pick up and drop offs.	This comment is noted. Abu bakar Heynes has been registered as an IAP for the NEMA process. All potential service providers can register on the CWA website: https://capewinelands.aero/opportunities/#supp-reg
W211	Terence Queue	Brilliant initiative	This comment is noted. Terence Queue has been registered as an IAP for the NEMA process.
W212	Abu bakar Heynes- **ABH SHUTTLE AND TOURS**	We as ABH shuttle and tours, fully registered with bee compliance, would like to offer our service in doing airport transfers, to and from airport, we also offering to do staff transport in and out, pickup and drop offs.	This comment is noted. Abu bakar Heynes has been registered as an IAP for the NEMA process.

W213	Emma Quinn - **Caren Helvey**	We see that your Instagram account (instagram.com/capewinelands_airport) and other social media accounts are not getting many followers, likes, comments, or views. This could be affecting your sales, personal reputation, and ability to attract new audiences. My name is Emma Quinn ([redacted]) from BulkSocialFanShop® [redacted]social media marketing company celebrating our 10th anniversary with a special $49 combo offer designed to enhance your social media presence. Instagram Combo Offer: 100% Real Profiles - 12K Followers + 8K Likes + 100K Views + 500 Comments + 1K Shares + 20 Bluetick profile engagements + Free 1 Million Instagram users database + Free 100k Email database - (Can be split into multiple links - Full details on our website) All for just $49! (Coupon code BSFS10) Get it here: [redacted] combo-offer We also have combo offers for Facebook, Twitter, LinkedIn, Pinterest, YouTube, and more. We can provide up to 2 million followers. Our Advantages: Free trial, Instant delivery, Accepts paypal, cards and cryptos, Lifetime guarantee, No password needed, 100% safe from bans, 100% refund guarantee, 10+ years of experience, 24/7 live support, 100% privacy, and more. All for just $49! (Coupon code BSFS10) Get it here: https://www.bulksocialfanshops.com/instagram-combo-offe	This comment is noted. Emma Quinn has been registered as an IAP for the NEMA process.
W214	Karl Lehmkuhl	A fantastic opportunity for growth	This comment is noted. Karl Lehmkuhl has been registered as an IAP for the NEMA process.
W215	Emma Quinn - **Celsa Walter**	We see that your Instagram account (instagram.com/capewinelands_airport) and other social media accounts are not getting many followers, likes, comments, or views. This could be affecting your sales, personal reputation, and ability to attract new audiences. My name is Emma Quinn ([redacted]) from BulkSocialFanShop® [redacted] a social media marketing company celebrating our 10th anniversary with a special $29 combo offer designed to enhance your social media presence.	This comment is noted. Emma Quinn has been registered as an IAP for the NEMA process.

		Instagram Combo Offer: 100% Real Profiles - 6K Followers + 4K Likes + 50K Views + 200 Comments + 200 Shares + 10 Bluetick profile engagements | (Can be split into multiple links - Full details on our website) All for just $29! (Coupon code BSFS10) Get it here: [redacted] We also have combo offers for Facebook, Twitter, LinkedIn, Pinterest, YouTube, and more. We can provide up to 1 million followers. Our Advantages: Free trial, Instant delivery, Accepts paypal, cards and cryptos, Lifetime guarantee, No password needed, 100% safe from bans, 100% refund guarantee, 10+ years of experience, 24/7 live support, 100% privacy, and more. All for just $29! (Coupon code BSFS10) Get it here: [redacted]	
W216	Markus van Wyk - **SCAFF-LOCK**	There should be more people on earth like everybody involved with the revamping of the CWA, but it takes initiative to make this airport adventure a reality. Please do not leave one stone unturned to make a success of this project. Do not talk to people that cannot say "Yes" to your requests. Make it happen!! I need this airport to start a tourist attraction not seen before. A treat to be remembered, and it is going to be born at CWA!! I need a lot of advice about the aviation industry for which I have so much passion. Please feel free to contact me.	This comment is noted. Markus van Wyk has been registered as an IAP for the NEMA process.
W217	Julian Kassner - **HERBAR investments**	New regional airport required to support the Winelands area	This comment is noted. Julian Kassner has been registered as an IAP for the NEMA process.
W218	Hugo Stroud - **Kruger Mpumalanga International Airport**	We at KMIA are supportive of enhancing connectivity and route development within the Region for the benefit of citizens and tourists to South Africa.	This comment is noted. Hugo Stroud has been registered as an IAP for the NEMA process.
W219	Anish Abraham	Infrastructure development is crucial to the growth of any country, even more so when it brings more competition to the market. Cape Town, as one of the most recognisable cities worldwide, and with its population in the	The comment is noted. Anish Abraham has been registered as an IAP for the NEMA process.

		broader region, deserves another airport that can cater to commercial flights. Being able to fly from Lanseria to CWA and skip all the big queues and city traffic will be awesome!	
W220	Willem Engelbrecht	This airport will play a intreclle part in and for aviation. An airline and fly from lanseria to cape winlands as there is no available slots at OR and we need an alternate to CPiA.	The comment is noted. Willem Engelbrecht has been registered as an IAP for the NEMA process.
W221	Lois Radu - **bid air**	Hey am lois radu from fisantekraal durbanville looking for a job and am desperate please help [redacted]	This comment is noted. Lois Radu has been registered as an IAP for the NEMA process. Please register as a service provider using the CWA website
W222	Barry Lodewyk	Great initiative and great business prospects for SMME's	The comment is noted. Barry Lodewyk has been registered as an IAP for the NEMA process.
Late Submissions from In-Process Scoping Phase (Comments revied after 26 August2024)			
W223	David Kirsch - **Pick n Pay**	best thing ever hope you are successfully	This comment is noted. David Kirsch has been registered as an IAP for the NEMA process.
W224	Jayson Philander - **Safintra Building Solutions**	The success of this new airport is pivotal to creating value in the aviation space and equally so a huge benefit to the Western Cape as it finds itself more and more a destination of choice for international travelers and tourists. I wish you well in your efforts to bring new life into the African the aviation space.	This comment is noted. Jayson Philander has been registered as an IAP for the NEMA process.
W225	Nobuntu Sibozo	Excited to expand Cape Town	This comment is noted. Nobuntu Sibozo has been registered as an IAP for the NEMA process.
W226	Werner Kuhn - **Kenridge Pharmacy**	I believe the airport will put Durbanville on the international map and it has my full support	This comment is noted. Werner Kuhn has been registered as an IAP for the NEMA process.
W227	Matthys Lourens	I believe the airport will bring major environmental benefits due to reduced diversion fuel required. The location is ideally situated for numerous visitors to the Cape Winelands, both local and international. Furthermore, this airport will be much safer to travel to for many passengers, especially after	This comment is noted. Matthys Lourens has been registered as an IAP for the NEMA process.

		dark. Impact of noise on populated areas will be significantly less as the flight path of aircraft will pass over significantly less populated areas.	
W228	Shirvaan Abrahams - **Abrahams investments pty ltd**	We fully support this incredible economic opportunity to help grow business and create more options for affordable travel	This comment is noted. Shirvaan Abrahams has been registered as an IAP for the NEMA process.
W229	Hein Kulsen - **HACT Enterprise**	I believe that the airport will bring significant economic benefits to our province and I hope and believe that the developers and owners are planning with our environment as a priority. This will also ensure that tbe CWA becomes an entity for others to follow. Let's do this!	This comment is noted. Hein Kulsen has been registered as an IAP for the NEMA process.
W230	Jacq W - **Apex Polymers Solutions**	We are a company that believe and thrives to promote sustainable products and drive to preserve our beautiful environment.	This comment is noted. Jacq W has been registered as an IAP for the NEMA process.
W231	Pieter Le Roux	Here to make Western Cape better	This comment is noted. Pieter Le Roux has been registered as an IAP for the NEMA process.
W232	Phumelelo Tennyson	I would like to wish you all the best and good things on your new adventure, on creating new jobs, improving the economies strength, and not forgetting the aviation industry.	This comment is noted. Phumelelo Tennyson has been registered as an IAP for the NEMA process.
W233	James Coetzer	I offer a complete turnkey signage and branding solution with experience in Airport and project management. I'd be happy to provide more info on request.	This comment is noted. James Coetzerhas been registered as an IAP for the NEMA process. All potential service providers can register on the CWA website: https://capewinelands.aero/opportunities/#supp-reg
W234	James Coetzer	We offer flexographic printing and packaging solutions. Our typical products include branded condiments, sachets and specialty small run prints. We would be happy to provide more info should you require.	This comment is noted. James Coetzer has been registered as an IAP for the NEMA process. All potential service providers can register on the CWA website: https://capewinelands.aero/opportunities/#supp-reg
W235	Charl Watson	Absolute necessity for the 'northern Cape Town areas' for growth	This comment is noted. Charl Watson has been registered as an IAP for the NEMA process.
W236	Teddy Theron - **Negosie Shop and Exop**	Glad that this is happening. All the best.	This comment is noted. Teddy Theron has been registered as an IAP for the NEMA process.

W237	Asiphe Mlinganiso	I would like to register as an interested person in the environmental impact assessment ,to expand and grow.	This comment is noted. Asiphe Mlinganiso has been registered as an IAP for the NEMA process.
W238	Robert De Mink	The Cape Winelands Airport will be an invaluable addition to the Cape Town and Western Cape landscape. From a growth and opportunity perspective, it will not only be financial benefit, but it will also benefit the growing Northern Suburbs community.	This comment is noted. Robert De Mink has been registered as an IAP for the NEMA process.
W239	Joseph Williams - **Internet Fibre Solutions**	We support the airport	This comment is noted. Joseph Williams has been registered as an IAP for the NEMA process.
W240	Melanie Burgers	I support the development as long as it creates sustainable economic opportunities for the local community.	This comment is noted. Melanie Burgers has been registered as an IAP for the NEMA process.
W241	Willem Meuwesen	Will be great opertunity for Winelands	This comment is noted. Willem Meuwesen has been registered as an IAP for the NEMA process.
W242	Jaco Smit	I would love to keep in touch with any new developments as I'm interested in establishing a business at the airport when operational.	This comment is noted. Jaco Smit has been registered as an IAP for the NEMA process. All potential service providers can register on the CWA website: https://capewinelands.aero/opportunities/#supp-reg
W243	Neil Jaxa - **ECJ Construction and Projects**	Let's grow together our world and prosperity province.	This comment is noted. Neil Jaxa has been registered as an IAP for the NEMA process.
W244	Gareth Whitehead - **Aggreko**	I support RSA. Aero investment into the Winelands airport. I support the partnership in a sustainable supply of solar and clean power gebneration mix and options to this investment.	This comment is noted. Gareth Whitehead has been registered as an IAP for the NEMA process.
W245	Steven Comrie - **Gochu Gang stellenbosch**	This is an incredible addition to the western cape. It is well needed and on an already semi-developed site, so can't see how it's environmental impact will worsen anything greater. However it's economic impact and amounts it will save plane carriers in feul, transport distances for nearer commuters needing to fly will also create huge economic /environmental gain in saving	This comment is noted. Steven Comrie has been registered as an IAP for the NEMA process.

		driver miles. Very excited for it's launch, it will be a shinning economic driver in the Cape northern suburbs and winelands area.	
W246	Casper Oosthuizen - **Alpha Zero Consultants Pty Ltd**	I support the new airport, as an business men based in Paarl and traveling allot overseas for business, this new airport will be a great push for the economy, increasing tourism to our beautifull country and creating new jobs, which is so important for our economy to grow and there by uplifting all the citizens in our country.	This comment is noted. Casper Oosthuizen has been registered as an IAP for the NEMA process.
W247	Neil Wolter - **KLS Consulting Engineers**	In support of the new development	This comment is noted. Neil Wolter has been registered as an IAP for the NEMA process.
W248	Daniel Sheard - **African Lynx**	I fully support the development of the Cape Winelands airport.	This comment is noted. Daniel Sheard has been registered as an IAP for the NEMA process.
W249	Chad Ehlers - **Cape Town Helicopters**	We are in support of your plan to develop an extra airport.	This comment is noted. Chad Ehlers has been registered as an IAP for the NEMA process.
W250	Mnikeli Zilani - **Uwakhe PTY Ltd**	I would like my business to be the part of the project as am staying in kraaifontein around the area	This comment is noted. Mnikeli Zilani has been registered as an IAP for the NEMA process. All potential service providers can register on the CWA website: https://capewinelands.aero/opportunities/#supp-reg
W251	Bernard Phillip Lebaea - **Nareng Trading**	This would be a great opportunity and advance economic development in our region	This comment is noted. Bernard Phillip Lebaea has been registered as an IAP for the NEMA process.
W252	Dennis Jones - **Dynamic Business Advisors & Accountants**	You have my full support as a resident of Durbanville. This is going to be game changer! You will hear from me soon with regard to my tourist project /proposal linked the route that you are on.	This comment is noted. Dennis Jones has been registered as an IAP for the NEMA process. All potential service providers can register on the CWA website: https://capewinelands.aero/opportunities/#supp-reg
W253	Tamara Loutchia	I'm in the travel industry so this is an exciting phase for sure. And I'm so happy for more job creation	This comment is noted. Tamara Loutchia has been registered as an IAP for the NEMA process.

W254	Craig Robertson - **Oakhurst Property Group**	Great initiative!	This comment is noted. Craig Robertson has been registered as an IAP for the NEMA process.
W255	Hugo Fourie - **Hurosco Properties and Construction Holdings Pty Ltd**	I support the build of a second airport for the Cape Town region. I hope it will be able to accommodate the A380/777/747	This comment is noted. Hugo Fourie has been registered as an IAP for the NEMA process.
W256	Kwazi Khumalo	I wish this project very well as a student pilot I hope to one day be able to operate from this new airport.	This comment is noted. Kwazi Khumalo has been registered as an IAP for the NEMA process.
W257	Anthea Frith	Exciting times ahead	This comment is noted. Anthea Frith has been registered as an IAP for the NEMA process.
W258	liesl dewet	Excited for the airport and job opportunities that comes with it.	This comment is noted. liesl dewet has been registered as an IAP for the NEMA process.
W259	Vernon Kirsten	Hi Folks,I am in contact on a weekly basis with Deon Cloete and Mark Wilkinson, however,I can do much more via www.skal.org www.saubuntu.org.za www.satsa.com and FB Tourism Jobs Matter and No Way SAA (I managed to assist to stop the plunder of the SAA assets by powers that be,now deceased)Regards Vernon Kirsten also on LinkedIn and www.bigvfuncharters.com www.bigvwine.com www.busking.com	This comment is noted. Vernon Kirsten has been registered as an IAP for the NEMA process. All potential service providers can register on the CWA website: https://capewinelands.aero/opportunities/#supp-reg

SUMMARY OF PUBLIC PARTICIPATION TO DATE

Pre-application Scoping Phase PPP

Numerous methods were used to effectively engage I&APs in the Pre-Application Scoping Phase of the S&EIA for the proposed CWA expansion. The Public Participation (PPP) consisted of three main components: i) Notification, ii) Engagement, and iii) Comments and Response, as elaborated below:

Public Participation Period

The pre-application draft Scoping Report (containing NEMA, NEM: AQA and NWA detail) was made available for a 30-day commenting period to potential I&APs including but not limited to: Neighbours; Organisations; Groups; Trusts; Aviation Organisations; State Departments; Organs of State; with jurisdiction in the area. Public participation ran from 8 November to 8 December 2023. Late IAP registration and comments were accepted.

Notification of IAPs & Availability of Documents

All potential IAPs were notified as follows:

- Notification letters were sent to neighbouring landowners via email. Landowners were asked to notify their tenants of the proposal and the commenting period.
- Written notifications sent via email to the municipal ward councillors that represents the community in the area. The ward councillors were asked to notify their community via their preferred method of communication or existing communication system.
- English and Xhosa advertisements were placed in the Tygerburger (a free newspaper). An Afrikaans advertisement was placed in Die Burger and an English advertisement in The Cape Times.
- Three larger site notices were placed on or near the site along various roads adjacent to the site. These site notices were in English, Afrikaans and Xhosa.
- The Pre-Application Scoping Report and supplementary reports were made available as separate links on the PHS Consulting website. Documentation was left on the PHS Consulting website for access by IAPs until 23 July 2024, and additional IAP registration and comments were accepted in this extended period.
- In addition, a hard copy of the report was lodged at the Fisantekraal Public Library for public viewing from 8 November 2023 up to 23 July 2024. A site notice was pinned on the library notice board for the same time period.
- I&APs were encouraged to submit any comments via email, fax, post or Whatsapp.
- I&APs who are unable to read or write or who otherwise need special assistance to state their views on the proposal, could request assistance in recording their comments or objections. These I&APs could send their comments using the voicenote option on Whatsapp.

Comments and Responses:

- All comments received from I&APs were filed and an I&AP register compiled and updated as required.
- Issues identified and comments received from Interested and Affected Parties (I&APs) were considered and informed various reports and studies, and amendments to the draft Scoping report, prior to the lodging of the formal application with DEA&DP.
- The comments received and responses formulated for the pre-application Scoping Report were recorded and responded to in the Comments and Response Report.

Focus Groups & Public Meetings

- A public meeting was held on the 8th of May 2024
- A focus group meeting with the Durbanville Farmers Association was held on the 4th of June 2024

All comments/issues raised during these meetings were recorded. Focus group meetings are ongoing.

In-process Scoping Phase PPP:

After submission of the application form, Registered I&APs and relevant State Departments and Organs of State had another opportunity to comment on the Draft Scoping Report.

Public Participation Period

The in-process Draft Scoping Report (containing NEMA, NEM: AQA; NEM: WA and NWA detail) was made available for a 30-day commenting period on the PHS Consulting website. Public participation ran from 24 July 2024 up to and inclusive of 26 August 2024. No extensions were allowed during the commenting period because of strict timeframes.

Notification of IAPs & Availability of Documents

- Registered I&APs and State Departments were notified via email / WhatsApp / sms (as per contact detail provided) of the availability of the draft Scoping Report. Any additional IAPs highlighted by State Departments, or the competent authority were included in the registered IAP list.
- An advertisement in English was placed in the Tygerburger with detail on and how to comment on the draft Scoping Report and the Water Use Licence application.
- Three site Notices in English were placed on or near the site along various roads adjacent to the site with detail on and how to comment on the draft Scoping Report and the Water Use Licence application during the 30-day commenting period.
- The In-Process Scoping Report and supplementary reports were made available as separate links on the PHS Consulting website for the duration of the 30-day commenting period. The supplementary documentation available included a Background Information Document (BID) containing public participation information.
- A hard copy of the report was lodged at the Fisantekraal Public Library for public viewing for the duration of the 30-day commenting period. A site notice was pinned on the library notice board for the same time period.
- I&APs were encouraged to submit any comments via email, fax, post or Whatsapp.
- I&APs who are unable to read or write or who otherwise need special assistance to state their views on the proposal, could request assistance in recording their comments or objections. These I&APs could send their comments using the voicenote option on Whatsapp.

Comments and Responses:

- All comments received from I&APs were filed and an I&AP register compiled and updated as required.
- All comments received will be responded to in the Comments and Response (C&R) report which will also be included in the final Scoping Report.
- All comments received during the 30-day comment period will be considered in the final Scoping Report.

Focus Groups & Public Meetings

- A focus group meeting with Fisantekraal / Klipheuwel Community Representative was held on the 16th of August 2024

- A focus group meeting with the Durbanville Heritage Society was held on the 17th of August 2024
- A meeting was held with the CoCT Air Quality Division on the 22nd of August 2024.
- Ongoing consultation with various interest groups during the in-process Scoping Phase included Garden Cities, the Stellenbosch Flying Club, ACSA, the Morningstar Flying Club, County Fair and various local landowners.

The final Scoping Report was submitted to the DEA&DP for approval on 6 September 2024.

MYEZO SUSTAINABLE DEVELOPMENT ALLIANCE

NPO REG NUMBER

304-501

Overview:
nurturing Nature, empowering communities

- At Myezo, we believe that every heartbeat of nature resonates within all of us. Our mission transcends mere conservation - it is about weaving sustainability into the fabric of our communities. We roll up our sleeves to remove illegal dumping and invasive alien species, reclaiming neglected and forgotten corners of our city. From tangled thickets to neglected parks, we establish balance, one indigenous plant and tree at a time.
- Our youth programs are more than tree-planting - they're seeds of knowledge. We cultivate eco warriors, nurturing their love for the land. Spekbooms and Fynbos become their allies in carbon sequestration.
- We are not lone rangers. We work with municipalities, businesses, and schools. Together, we choreograph climate action, turning challenges into pas de deux for a greener future.
- The United Nations Sustainable Development Goal 17 is our crescendo. Partnerships harmonize our efforts. With each handshake, we compose a symphony of change.
- We're young, but our roots run deep. Our impact whispers through transformed parks, cleaner air, and hearts awakened to nature's rhythm

Greater Flamingos at the Paarl Bird Sanctuary pictured.

Bird watching & conservation

- Nestled between the magnificent backdrop of Du Toit and Paarl Rock mountains,Mbekweni Paarl Bird Sanctuary is a hidden gem for bird enthusiasts. Here every winged visitor has a story to tell.
- The Hadeda ibis with their raucous calls echoing across the ponds and Bergriver.
- Flamingos graceful and pink, here they gather in flocks, creating a living canvas against the blue sky, with reflections that ripple like dreams.
- Conservation has a healing effect especially for those who live in the fringes of society

Nature based activities

- **SDG 4** is about holistic education to inculca te values of respect for nature in young minds. This exposure has a powerful effect on young minds
- **Mbekwen Paarl Bird Sanctuary**: A sanctuary indeed, but can we expand its "wings"?

Inclusivity

- Accessible, clean parks **PROMOTE EQUITY**, ensuring everyone can enjoy recreational spaces – **SDG 3 – Good Health & Well-being**.
- The space located between the Paarl Waste Water Treatment Works and Landfill both in close proximity to the township can be utilized for Health promotion.
- **Investment**: Allocate resources for natural recreational spaces. They're not luxuries; **they're necessities**.
- While New Orleans Park and Antonie's Vlei serve their purpose, we yearn for recreational spaces where youth can thrive, learn, and connect with the natural world. **SDG 10** - **Reduced Inequalities**

Youth Greening initiatives bringing and recreation

We don’t see what we do as work, but as Purpose and our Mission to help heal the world one human and one tree at a time. If we take care of the planet, the planet will take care of us. We are working with people from all walks of life united in our collective endeavor to leave this world better than we found it.

Indigenous trees and Veggies planting Education

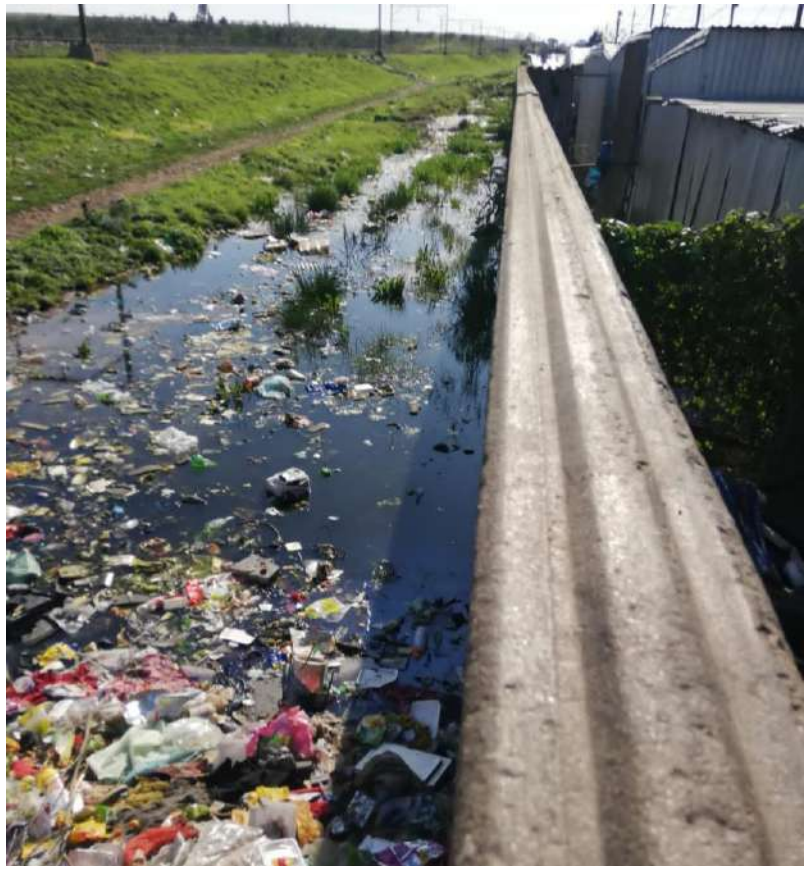
Holistic approach using Outdoor Education

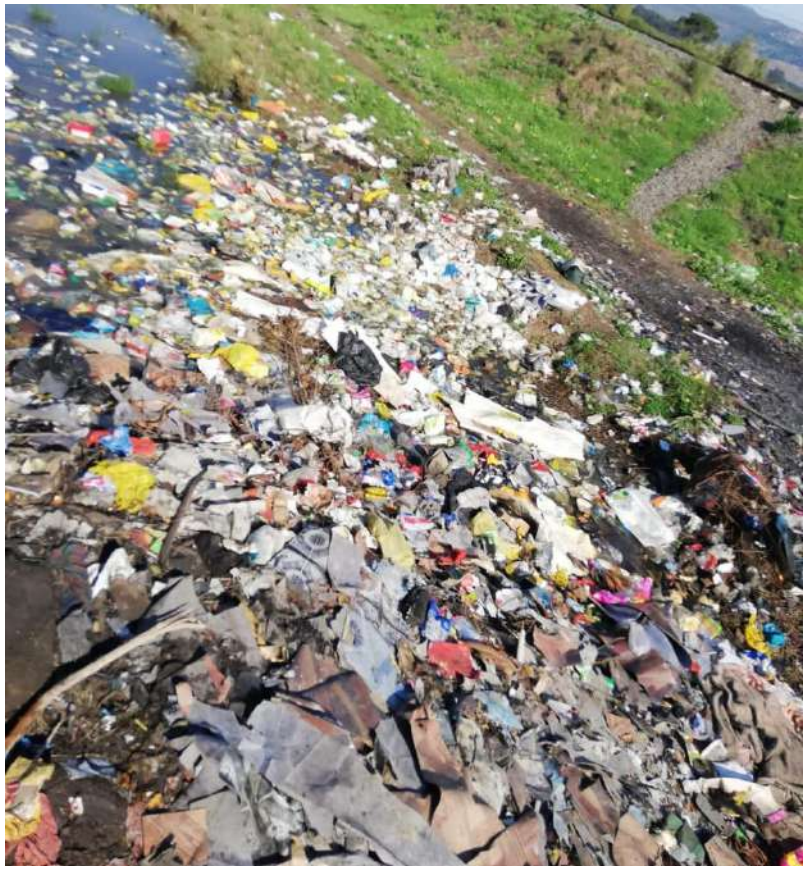
Indigenous Seed Collection

- Our youth hike Paarl Mountain, collecting native seeds. These seeds hold resilience, combat climate change, and whisper hope. Partnerships with Drakenstein Municipality, Cape Nature, and Paarl Rotary Club have fueled our past missions. As Myezo Sustainable Development Alliance, we believe that in SDG 17 where we come and stand together united in protecting the planet and its people. We propagate the seeds and grow them into trees. When they have grown, we plant them back to their original habitat and in open spaces..

School Outreach

Education and awareness is at the core of our existence. The Western Cape is a drought prone area and Climate Change phenomenon like "Day Zero" are not isolated occurrences. These require resilience, mitigation and Adaptation Strategies that endorse Climate Change efforts already outlined in the Integrated Development Plan.





Pain Point: illegal dumping and open space occupation

Impact

Human health impacts

Physical Safety: Litter in parks poses tripping hazards, especially for children who see parks as places of recreation. Broken glass, sharp objects, or discarded materials have caused a lot of injuries.

Respiratory Health: Accumulated rubbish may release harmful particles into the air, affecting lung health. Smoke from burnt waste exacerbates respiratory conditions.

Infectious Risks: Discarded food containers attract pests (e.g., rats, flies) increasing the risk of disease

Mental Well-being: Cluttered, unkempt spaces can contribute to stress and anxiety

Environmental Consequences

Soil contamination: Decomposing waste releases chemicals into soil, impacting plant growth and soil health

Water Pollution: Rainwater washes litter into nearby water bodies, affecting water quality and aquatic life

Aesthetic Degradation: Litter diminishes the natural beauty of parks, reducing their appeal and overall value. Perpetrators tend to use littered neglected spaces to set up illegal structure camps – these often being cesspools for vandalism activities and illegal items exchange

Biodiversity Loss: Rubbish disrupts ecosystems, affecting plants, insects, and small animals. It reduces habitat quality and availability.

Impact (continued)

Economic Impact

- **Property Values**: Well-kept parks enhance property values in nearby neighborhoods
- **Tourism Attraction**: Attractive parks draw visitors, benefiting local businesses and the economy - According to *BusinessTech SA informal economy is estimated to be R750 billion* (hidden from economic indicators and taxman) - GG Alcock **Biznews Conference 2024**

Awareness & Outcomes

Community Pride: Clean, well-maintained parks foster community pride and a sense of ownership. We have cleaned and rehabilitated numerous parks in Wellington and Mbekweni. Some of our volunteers are pictured here removing litter before planting hundreds of trees and plants

Indigenous Tree Planting Initiative

We have been well received by many locals and community members. We engage with councilors and the Drakenstein Municipality to target areas that are vulnerable to illegal dumping. We have been greatly assisted by the Parks Division. We believe that engaging with residents and supporting them in showing ownership is the only sustainable way to preserve our open spaces. Pictured here are residents who watch us working in their areas and feel compelled to come assist.

Street Gardens

Every seedling of indigenous plant, tree and vegetable has been planted by Myezo with the support of learners and farms in our effort to educate them in Sustainable Development Goal 1 – **No Poverty** and 2 - **Zero Hunger**, which is also linked to 3 - **Good Health and Well-being**. Children are usually the first to come and show support to what we are doing.

Indigenous Plants For Carbon Sequestration and Health

- We nurture **Spekboom** and **Proteas**, planting them alongside schoolyards and tucked into forgotten corners. Our youth - barefoot, hands caked in soil - understand that these plants are more than green ornaments; they're guardians of our planet. As proteas take root, so do values - responsibility, resilience, and the art of nurturing life. Beyond aesthetics, our work whispers through the rustle of leaves, the hum of bees. It's not loud, but it's lasting.

Pollution Awareness

At Myezo SDA, our expertise and experience stretches to longer than a decade in working with schools and children in education and awareness. We believe in the values upheld by our inhouse Community Psychology practitioners, stakeholders and volunteers.

We believe that to **Place-based education** is critical to inculcating values in the hearts of children. By taking them to places where litter/rubbish is **recycled, repurposed and reused**, they learn that the is a **Circular Economy** that they can one day tap into which leads to the sustenance of the community and their immediate environment. We are not only in the business of planting indigenous trees but also planting ideas in sustainability and conservation. Here our friend John from Plastic SA is teaching our learners how Product Packaging Designing can help reduce the throwing away of recyclable packaging. This is what we mean when we speak of another man's trash being another's treasure – virtue is indeed in the eye of the beholder.

In Conclusion

Myezo Sustainable Development Alliance stands
for environmental conservation, community empowerment, and sustainable practices. Our mission is to nurture biodiversity, combat climate change, and inspire future stewards through initiatives like seed collection, native
tree planting, bird watching and youth engagement. We weave hope into barren neglected spaces, one native tree, plant and animal at a time.

Thank you

Myezo Sustainable Development Alliance is a registered non profit organization that focuses on environmental education, health and Sustainability. We believe the therapeutic elements of nature and we promote biodiversity and
the United Nations Sustainable Development Goals.

We seek to co-create and build partnerships with different stakeholders (SDG 17) in our promotion of Good health and well being of humans and all of the natural world.

Please contact MyezoSDA for more information

Khahliso Lefatsa: 067 790 2433

Mzi Matsimbi: 061 494 6587

Boitsepelo Setloboko: 065 950 8973

Appendix A (C195) - Tree planting with Myezo advertisement

FROM THE DESK OF THE CEO
HAMISH ERSKINE

In 2020 Dube TradePort Special Economic Zone will celebrate its 21st anniversary since its establishment by the Kwa-Zulu Natal Provincial Government. The entity's establishment was mandated by the Special Economic Zones Act, administered by the Department of Economic Development and Tourism.

Looking back at this period, the organisation has emerged as one of the key drivers of economic development in the province of KwaZulu-Natal. It has made significant progress in attracting foreign direct investment into the province. Through its land agricultural infrastructure, Dube Trade PortCorp has successfully established itself as a truly integrated international trade and logistics hub, with the Dube TradePort Special Economic Zone at its core. Dube TradePort is home to a host of domestic and multinational investors who have created employment opportunities for the province and have established the platform for a knock-on effect of sustaining numerous jobs throughout the province.

Dube TradePort has also been instrumental in the development of key economic and social infrastructure projects, such as the new Dube TradePort Corporate Campus, which is a key anchor project in the Dube TradePort Special Economic Zone, in a manner that enables it to unlock the potential of the surrounding land parcels and create a vibrant mixed-use precinct. Various other projects are currently underway within the next few years, in a high-capacity water reservoir and storage system and construction of the new Dube Trade Bridge, which will provide direct access to the Dube TradePort Special Economic Zone from the north.

Dube TradePort has also been a beacon of good governance and has received a number of clean audit opinions from the Auditor-General of South Africa. Dube TradePort is also committed to sustainability and world-class support services, which are evidenced by the fact that Dube TradePort has been awarded the prestigious Airport Service Quality Award. This has led a direct impact on attracting new regional and international airlines to fly to the Dube.

This has improved the region's connectivity, and cargo volumes, and global competitiveness. As an organisation, we are pleased that you have taken the journey with us. As we work also at a more sustainable future, we will continue to work with our partners, as we build on the economic development platform and foster investment opportunities that will further enhance our position as a leading industrial, manufacturing and logistics platform.

PUBLIC BONDED WAREHOUSE

MAINTAIN A HEALTHY CASH FLOW THROUGH BONDED WAREHOUSES

In today's fast-paced global economy, the challenges of importing goods from foreign countries can be overwhelming. Importers are required to pay duties and taxes on their goods before they can be released from customs control. This process can be a substantial constraint to a company's cash flow. Fortunately, there is a solution to this problem: bonded warehouses. A bonded warehouse is a facility where imported goods are stored without paying customs duties and taxes. This deferred payment can provide a welcome relief to a business's cash flow.

The response to this market need, Dube TradePort is launching a bonded warehouse facility within the Dube Cargo Terminal. Dube TradePort's Bonded Warehouse will be operated by Imperial Logistics Dube Cargo Terminal Bonded Warehouse Manager and Business Development

Based on the initial volumes we will be looking at expanding and introducing these facilities in other areas within the Dube TradePort precinct.

Additionally, bonded warehouses play a crucial role in storing goods awaiting export. This can be particularly beneficial for agricultural products, which often require specialised handling and paperwork associated with importing restricted goods. bonded warehouses offer a secure and compliant environment for these goods, ensuring they meet all regulations before shipment.

Bonded warehouses can also be a strategic tool for businesses looking to consolidate shipments from various suppliers. By storing goods from different sources in a bonded warehouse, businesses can create a consolidated shipment, which

Airfreight Volumes Through Durban's Dube Cargo Terminal Spike

Airfreight volumes through Dube TradePort's Cargo Terminal have risen significantly over the past six months as the effects of congestion and slow-throughput capacity at South Africa's major ports ripples across the supply chain.

Durban's air cargo operations, handled through the Dube Cargo Terminal at King Shaka International Airport, have been on the rise over the financial years 2022/2023 and 2023/2024.

However, demand for airfreight spiked over the past four months leading into 2024 with cargo throughput rising by 57% quarter-on-quarter from September to December 2023, and port challenges continued to drive significant demand towards airfreight in January 2024.

"This significant increase in airfreight has been observed across various industries, from perishables to automotive, the latter traditionally being reliant on ocean freight. This emphasises the need of these industries to ensure uninterrupted production and timely delivery to export markets," said Mr Ricardo Isaac, Dube Cargo Terminal Senior Manager: Cargo Development and Operations.

" From September through to December 2023, we saw fruit exports to the Middle East and European markets double in volume compared with the same period last year.

On the automotive side, in November we saw volumes approximately 30% higher than normal being moved through our airfreight cargo terminal," he said.

This trend shows that for time-sensitive commodities and in cases where production stoppage risks are heightened, having an efficient air option, such as the Dube Cargo Terminal, has become invaluable, and remains an important part of the supply chain, concluded Isaac

dubai
cargo
TERMINAL

SP0513
MNZS6011

INDUSTRIAL POLICY ACTION PLAN

ECONOMIC SECTORS AND EMPLOYMENT CLUSTER
IPAP 2014/15 - 2016/17

the dti
Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

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FOREWORD BY THE MINISTER OF TRADE AND INDUSTRY
Dr Rob Davies MP

It is my pleasure, once again, to make some prefaratory remarks to the sixth annual Industrial Policy Action Plan (IPAP 2014/15 – 2016/17). Looking back over the past five years of the IPAP, we believe we can confidently claim that it has significantly strengthened our industrial policy in the most difficult of times. It has created new platforms, absorbed significant new learning, built capacity and strengthened the partnerships that are critical to successful industrialisation.

We are nevertheless far from content with what has been achieved to date. Significant progress has indeed been made in a number of the IPAP's sectoral and transversal areas of application; but the results have been uneven and much remains to be done to develop greater traction around many IPAP interventions.

This year's IPAP is therefore all about further upping our game: pinpointing where we think policy improvements can be made; how we can achieve more concerted transversal action; and how we can implement sector strategies based on a deeper understanding of sector and company dynamics, with increased consistency and certainty. But the fact that we are into our sixth iteration is also a testament to the degree to which IPAP has become embedded in the policy sphere and woven into the fabric of the South African development project.

The year 2014 will open up new platforms for action mandated by the incoming administration. At the same time as responding to these, IPAP should remain focussed on continuous improvement of the instruments that have been painstakingly and transparently developed over the past six years. These include: continuing to build the capacity required to analyse, coordinate and implement effective programmes underpinned by sound research; forging strong partnerships and stakeholder engagement; rigorous programme oversight; and open-minded 'discovery' with respect to what works and what does not.

Evidence, consultation, listening, doing

As we have noted before, Government industrial policy interventions on their own, in isolation from the actions of all the stakeholders who have an investment in our democratic future, are not enough. Confronting the many challenges that undermine our economy requires a disciplined and principled joint effort on the part of all the state agencies and social partners. It requires unconditional respect for rigorous, evidence-based argument, matched by an equal willingness to listen to 'ordinary' voices that speak to us from beyond the normal comfort zones of theoretical and media debate. In the same vein, we need to be constantly wary of all 'big' economic narratives - especially those that present themselves as 'authoritatively binding' accounts of reality - always subjecting them to close scrutiny and a healthy dose of scepticism. Global experience has shown that yesterday's commanding economic orthodoxies can become todays failed projects, especially where country-specific context and dynamics are not properly factored in.

We at **the dti** are committed to doing everything in our power to contribute towards securing a collective social agenda that will allow us to address South Africa's most pressing developmental challenges with renewed urgency and decisiveness. This means, for us, first and foremost tackling the unacceptable levels of poverty, economic exclusion and inequality that continue to hurt millions of our people, disfigure our country and undermine its future security. We see no necessary contradiction between economic growth and development and social rights; and our approach to industrial development means never losing sight of our constitutional mandate to contribute towards building an inclusive values- and rights-based economy and society.

Government must listen and engage, up and down the social spectrum, whilst continuously pushing for optimal policy coherence - within government, between departments and across the full range of stakeholders and social partners. That is why all the IPAP Key Action Programmes take the form of quarterly, sequenced and monitored multi-stakeholder interventions subject to rolling annual review. It is also why progress on the implementation and impact of key IPAP programmes (in, for example, areas like Business Process Services and the Automotive Production and Development Programme) is so tightly monitored and is subjected to major impact evaluations at regular intervals by independent, expert service providers.

Finally, it is why the IPAP pays such consistent attention to identifying the economy-wide constraints that stand in the way of more rapid progress on a wide range of fronts; and why it continuously identifies and speaks to newly emergent opportunities as they present themselves, making the case for those it believes should be vigorously pursued.

The IPAP continues to proceed by taking full cognisance of international developmental 'success stories', whilst maintaining a strong, creative and nuanced alignment with the broad vision of the National Development Plan (NDP) and the main drivers of the New Growth Path (NGP). Building on these foundations, we fully expect the IPAP to play an increasingly sophisticated and determinant role in South Africa's ongoing development, with a consistent focus on growing the dynamism, competitiveness and labour-absorbing capacity of the manufacturing sector, especially in the traditional and non-traditional tradable and value-adding sectors of the economy.

It is important once again to stress that IPAP is predicated on the state defending, supporting, and nurturing the manufacturing sector. The state exercises leadership by 'steering but not rowing'. Thus IPAP identifies a complex range of complementary, interlocking policies that require alignment, and in some areas - such as aspects of macro policy - subordination to industrial policy.

Chief amongst the issues to be tackled going forward must be a substantial reduction of the current account deficit, through a combination of expanded exports and replacement of imports - particularly in the value-added and more labour-intensive sectors with high trade deficits.

The global scene

The SA manufacturing sector has largely weathered the Great Recession triggered by the financial crisis of 2007-2009, albeit with some damage to the diversity and sustainability of the sector. However, many threats and constraints remain to be confronted: most significantly, on the international front, a continuing inertia associated with the slow, hesitant and uneven recovery of the global economy; on the domestic front, the ongoing negative impact of sharply escalating administered prices and a turbulent industrial relations environment.

Strong fiscal expansionary policies in major developed economies have not succeeded in fostering credit creation or significantly strengthening aggregate demand, especially in SA's major trading partners, the EU and US, where depressed demand continues to hurt SA exports and is expected to remain sluggish.

At the same time, the commodity super-cycle that spawned high prices for mineral commodities is over; and a major structural shift is under way in the global economy, characterised by persistent negative and slow growth in the developed economies and by sustained, but diminished growth in the developing and transition economies. These latter economies are of necessity moving away from an exclusive focus on export-led growth and are placing more emphasis on domestic demand – not least in China, which is making rapid structural change up the value chain.

There is good reason for this generalised change of direction. In our view – and that of many others – there is now a formidable body of evidence to suggest that:

i. Growth strategies relying exclusively on primary or low value-added exports must sooner or later reach their limits – particularly when many countries pursue them at the same time.

ii. Competition among economies based on low unit labour costs and taxes leads to a race to the bottom, with few development gains but potentially disastrous social consequences. At the present juncture, where growth of demand from developed countries is expected to remain weak for a protracted period of time, the limitations of such a growth strategy are becoming ever more obvious.

iii. Therefore - as has been consistently argued in successive iterations of IPAP - a rebalancing of the drivers of growth is indispensable, with full weight given to domestic demand and a much more robust South-South orientation.

On this platform, we need to intensify our focus on export expansion into the rest of the African continent, taking advantage of continuing higher rates of growth than in many other regions of the global economy, Deepening our trade and regional integration linkages with the rest of Africa makes very good sense given geographical proximity, the logistical linkages that are already in place and the existence of a range of economic sectors with good potential to match up with SA's productive capabilities.

Keeping afloat in a high-tech digitised world

Furthermore, uncertain as the global economic recovery may be, technological change continues at breakneck speed. It is already common cause that we have entered a new wave or 'second machine age' driven by additive manufacturing; exponential progress in computing, telecommunications and digital access to knowledge; composite and new materials; and the drive for energy efficiency and climate change mitigation.

It is critically important that SA manufacturing remains in touch with these new frontiers, energetically leveraging their potential to drive up productivity, competitiveness and employment creation.

This necessitates an ever-closer relationship between government departments such as **the dti** and DST, the private sector and universities and research and development (R&D) institutions. It also means that government must up the pace in developing the policy instruments required for technology acquisition, innovation support and commercialisation of home-grown new technologies; and must do so in a manner attuned to SA's competitive advantages and opportunities.

On the climate change front, our view is that great caution must be exercised to ensure that emergent carbon mitigation policy interventions and environmental regulation - including the proposed carbon tax - are carefully sequenced and calibrated, taking into account the concrete circumstances of the most vulnerable sectors, so that important domestic capabilities are not destroyed and jobs lost in the process.

The challenge of shale gas

Natural gas currently makes up only 3% of the total primary energy mix in South Africa. The preliminary identification of massive reserves of shale gas - currently estimated at possibly as large as 485 trillion cubic feet – which would, if proven to be correct, make it the fifth largest shale gas field in the world - presents SA with a very important opportunity to lower the cost of energy, especially for the production sectors of the economy and for working families.

This means that both the exploration and exploitation of this potential windfall must be carried forward within the framework of a programme that is both environmentally sustainable and at the same time maximises the upstream and downstream linkages that will need to be built.

This is in line with one of the central tenets of the beneficiation approach set out in the previous IPAP (and the first Action Plans for which are now set out in IPAP 2014-2016.) This is the principle that SA must leverage its enormous resource endowment as a competitive global advantage for its manufacturing sector, whatever the difficulties associated with so called resource-based industrialisation, if we are not to further deepen the very growth path of dependence on primary commodity export from which we are trying so hard to escape.

The nuts and bolts of manufacturing: towards a deeper knowledge

Mindful of these considerations, there is an associated 'internal' challenge to be met: developing a much better understanding of the structure and dynamics of key sectors of domestic manufacturing, down to company level. The trick is not to pick winners in advance, but to identify and engage with proven and emergent strong performers, providing them with the support they need to become even more competitive. This requires a strong emphasis on stimulating industrial/manufacturing clusters and associated upstream and downstream value-chain linkages; supporting integration into global value chains; imposing binding (export or domestic) performance criteria; and driving enhanced competitiveness across the economy as a whole.

We need to know our home turf in detail. Continuous improvement of industrial policy must ensure a qualitative transitional shift from generalised sector knowledge to a more intimate understanding of - and year-round engagement with – specific sub-sectors, industry associations and individual firms.

SA must develop a smarter, more focused and nuanced export strategy that strongly supports competitive winners and leverages our resource endowments and technical/scientific capabilities. Taking account of the serious and persistent negative balance on the trade account and mindful of both the sectors and companies that are doing well, especially with respect to new markets in Africa and elsewhere, we need a process to better identify key export-oriented firms and support and reward them with conditional incentives, increased industrial financing and export promotion assistance.

At the same time, the search for new export markets must be accompanied – and, indeed be co-dependent upon - a strongly enhanced focus on stimulating and growing aggregate domestic demand. This must include consolidation of the key instruments already in place: infrastructure development, designation and local procurement, plus selected trade measures. Support for local manufacturing as a whole should also seek to create and strengthen dynamic linkages between the production and services sectors of the economy.

Strengthening and focusing industrial finance

Mobilising industrial finance is crucial. We must make further and more rapid progress towards ensuring that SA's industrial financing, across all DFIs, is better designed, more coherently aligned and more competitive in relation to our peer middle-income countries, with an optimal mix of public and private sector financing. State and private capital co-operation must increasingly complement one another if we are to achieve the levels of investment in the production sectors that is required. Specifically, immediate attention needs to be given to:

- strengthening of conditionalities of industrial financing instruments, taking due care not to disrupt the flow of industrial financing;
- Improving the coherence of the industrial financing system particularly as between on-budget **dti** incentives and funding flows from the IDC and the Export Credit Insurance Corporation (ECIC).

Leveraging procurement and supplier development

The experience gained and platforms already built have opened the door for a step-change in the implementation of local procurement and supplier development across all state agencies. National Treasury is currently leading a multi-departmental review of procurement policy and practice, which will secure greater value for money and wider economic benefits. This should include securing deeper compliance with localisation instruments and building capacity in procurement agencies to roll out effective strategic sourcing and supplier development programmes.

Further progress and consolidation of public procurement support for manufacturing is critical - especially where these measures are fiscally neutral, with wide economic multipliers and benefits.

Getting these measures right – and beginning to see clear evidence of their beneficial impact - should provide a stronger basis for persuading large private sector companies that local procurement and strategic sourcing are not only in the national interest but that, in many instances, can make sound commercial sense - particularly if security of supply, quality standards and cost of lifecycle (rather than purchase cost) are taken into account.

The big picture

To achieve and consolidate the objectives we have been discussing, new platforms will need to be continuously built to strengthen existing stakeholder engagement and deepen trust and cooperation between government, the private sector and organised labour. We warmly invite all stakeholders to join us in this project, in the spirit of active and open-minded collaboration that we are strongly advocating as the guiding thread for all our joint actions in 2014 and beyond.

In conclusion, I would like to emphasise that whatever successes have been achieved in many areas of **the dti**'s work would not have been possible without the support of fellow Ministers and Deputy Ministers; coordination and cooperation with sister departments; the alignment and support of all **the dti** divisions and entities; and the close engagement of other institutions, especially the Industrial Development Corporation. To all these individuals and institutions - and to the hard-working staff at **the dti** - I offer both my gratitude and my encouragement to redouble our collective efforts.

Dr Rob Davies, MP
Minister
Trade and Industry

A MESSAGE FROM THE DIRECTOR GENERAL
Lionel October

The publication of the sixth iteration of the Industrial Policy Action Plan is an important milestone. The National Industrial Policy Framework and successive iterations of IPAP provide a policy and programme fulcrum for the work of the Department of Trade and Industry as a whole, enabling alignment and integration of its work within the strategic vision of a more equitable society provided by the National Development Plan and the programmatic perspectives set out in the New Growth Plan.

Thus the work of all the divisions of **the dti** both inform and are informed by action plans and programmes set out in the IPAP 2014/15 – 16/17, in keeping with the Department's constitutional mandate and mission statement. This incorporates **the dti**'s vision of a dynamic South African industrial economy, globally competitive and characterized by inclusive growth and development, decent employment and equity – in short, an economy built on the full potential of all citizens.

The IPAP is not the exclusive preserve of **the dti**. It is a product of the Employment and Economic Sectors Cluster of Government; many of the programmes and actions plans it sets out require coordination and often a lead by other departments and agencies.

There are no quick fix solutions for industrial development, especially in the face of extremely strong headwinds – the Great Recession and its aftermath for the global economy; the deep structural problems which characterize the domestic economy and the constraints and tactical challenges that have to be overcome. I am, however, confident that much has been achieved, significantly deeper capacity built and good learning absorbed. New industrial policy platforms have been created and existing ones strengthened. The IPAP has been embedded as an indispensable part of the broader developmental policy framework of government. We say this as we recognize that more needs to be done on all fronts.

Most of what the department does has to be carried out in close consultation and co-operation with **the dti**'s stakeholders: business, labour and the community constituency.

On behalf of **the dti** I wish to thank all the many stakeholders – from trade unions to business organisations, industry associations and companies, to organisations and institutions of civil society - and to the many individuals who have supported its work.

In the same vein, all our industrial development work, across the full spectrum of sectors, is underpinned by the work of the Industrial Development Corporation. No modern economy can function without the foundation of a Standards, Quality Assurance and Metrology (SQAM) institutional framework. This is provided by the untiring work of the South African Bureau of Standards, the National Metrology Institute of South Africa, the National Council for Compulsory Specifications and the South African National Accreditation System. In parallel, Government's collective effort to stem the tide of illegal imports and illicit economic activity rests on the Customs Division of the South African Revenue Service; whilst the strategic deployment of tariff policy rests on the International Trade Administration Commission. The work of the Competition Commission forms an indispensable component of the all-round effort to foster a more competitive economy.

Thanks should also go to the many individuals and institutions responsible for the research work which underpins the IPAP and other industrial development efforts of **the dti**. To all these organisations, and all those many more which support the work of the IPAP, I am grateful and commit to strengthening even further our collaborative efforts.

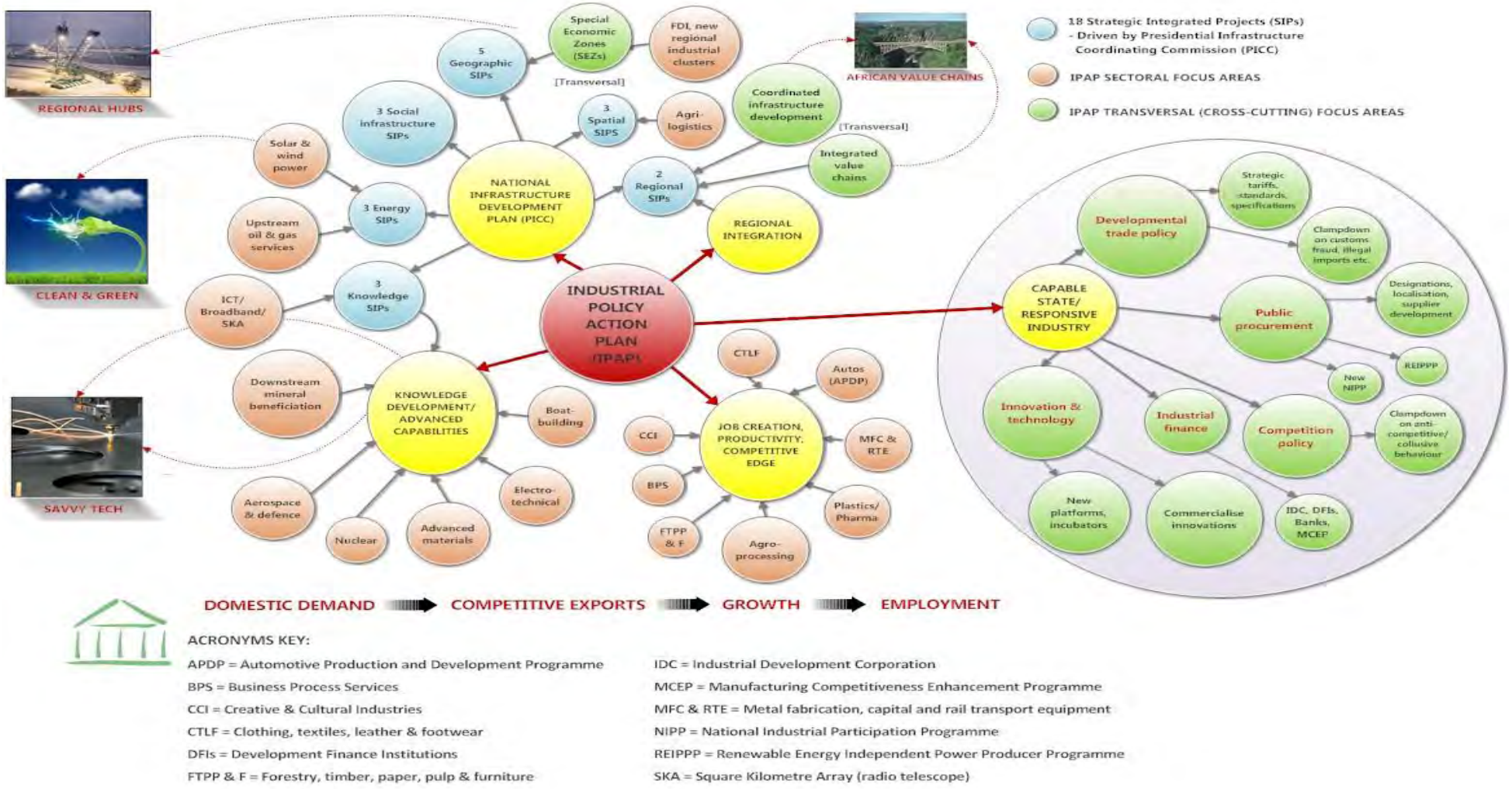
Finally I wish to thank **the dti**'s sister departments in the Economic Cluster and the provincial and local spheres of government for their continuous collaboration with **the dti** in the effort to make sure that the programmes set out in the IPAP happen.

I am confident that through our collective efforts much has been achieved and a clearer path setting out what needs to be done mapped out. Finally, as I have stated before, our resolve to do more in the years to come is underpinned by the conviction that our efforts are strengthened immeasurably if we work together to move towards the vision of an equitable society.

Lionel October
Director General
The Department of Trade and Industry

IPAP IN ACTION: HOW IT ALL FITS TOGETHER

IPAP: THE INDUSTRIAL MUSCLE OF THE SA ECONOMY



ACRONYMS KEY:

APDP = Automotive Production and Development Programme
BPS = Business Process Services
CCI = Creative & Cultural Industries
CTLF = Clothing, textiles, leather & footwear
DFIs = Development Finance Institutions
FTPP & F = Forestry, timber, paper, pulp & furniture
IDC = Industrial Development Corporation
MCEP = Manufacturing Competitiveness Enhancement Programme
MFC & RTE = Metal fabrication, capital and rail transport equipment
NIPP = National Industrial Participation Programme
REIPPP = Renewable Energy Independent Power Producer Programme
SKA = Square Kilometre Array (radio telescope)

ECONOMIC ANALYSIS: THE POLICY CONTEXT FOR IPAP

South Africa's long term vision of an equitable society is defined by the National Development Plan (NDP). The IPAP is informed by this vision and is both framed by and constitutes a key pillar of the programmatic perspectives set out in the New Growth Path (NGP). Its core objectives remain as set out in the National Industrial Policy Framework (NIPF) of August 2007:

- To facilitate diversification beyond our current reliance on traditional commodities and non-tradable services. This requires the promotion of increased value-addition per capita characterised particularly by movement into non-traditional tradable goods and services that are competitive in both export markets and the domestic economy.
- The long-term intensification of South Africa's industrialisation process, and movement towards a twenty-first century knowledge economy.
- The promotion of a more labour-absorbing industrialisation path with a particular emphasis on tradable labour-intensive goods and services and economic linkages that catalyse employment creation.
- The promotion of a broader-based industrialisation path characterised by greater levels of participation by historically disadvantaged economic citizens and marginalised regions in the mainstream of the industrial economy.
- Contributing to industrial development in Africa, with a strong emphasis on building regional productive capabilities.

But reality changes all the time. The programmes set out in the IPAP 2014 reflect a continuing process of response and readjustment to the shifting demands and opportunities that must be confronted in order to keep this mandate alive and vital; most recently, a much closer alignment of IPAP priorities with the National Infrastructure Plan currently being implemented under the guidance of the Presidential Infrastructure Coordinating Committee (PICC). This very large and ambitious infrastructure build programme – consisting of 18 Strategic Integrated Projects - is specifically designed to underpin industrial development across the economy as a whole, unblocking critical bottlenecks and - provided that maximum localisation of inputs is achieved – promising to massively increase domestic demand.

In this strategic context, IPAP puts a high premium on collaborative, properly sequenced actions. It is premised on the need for ever-closer alignment and consolidation of its linkages with the policies and action plans of the primary productive sectors of the economy - in particular agriculture and minerals. It is also predicated on the need for continuously strengthened intra-governmental co-ordination and tighter compliance with key industrial policy levers (such as public procurement) that are specifically designed to support the broader domestic manufacturing sector.

This means, on the one hand, developing the innovative, competitive, knowledge-based, tech-savvy initiatives needed to create a revitalised export sector, whilst, on the other hand, advancing our capacity to integrate with the critical national infrastructure programme and support labour-intensive, value-adding sectors that are best placed to stimulate domestic demand and deliver long term, sustainable employment growth.

Successive iterations of IPAP have consistently sought to articulate a deeper, more comprehensive and integrated set of solutions to the major fault-lines of South Africa's economic structure; an orientation that necessarily implies a fundamental shift of policy emphasis in favour of the productive sectors of the economy. In order to deliver on these objectives, the following key areas of intervention will continue to be energetically pursued throughout the 2014-2016 period contemplated in this document - and further into the medium and longer term future:

1. Economy-wide:
    - Pursuit of a stronger articulation of macro- and micro-economic policies, greater policy coherence and better implementation.
    - Stronger alignment of industrial policies and programmes with investment and export-promotion programmes such as the National Exporter Development Programme (NEDP) focussed on widening and balancing SA's exporter base.
    - Better policy alignment, both in general and in relation to specific sector strategies, focussed particularly (but not exclusively) on those sectors where the domestic economy enjoys global competitive advantages.
2. Procurement:
    - A sustained effort to secure compliance with existing public procurement policies and strategic supplier development/sourcing measures, with the overall aim of supporting the manufacturing sector to raise domestic production and grow employment.

This effort will be combined with:

- further policy framework and institutional improvement measures flowing from the Public Procurement Review: and
- strong persuasive initiatives to secure greater private sector support for local manufacturing - a contribution that large companies in particular are well placed to make, given their significant procurement spend. It also includes providing further support for broad based black economic empowerment (BBB-EE) and better alignment between BBB-EE and industrial development objectives – further discussed below in the section on 'Critical New Initiatives'.

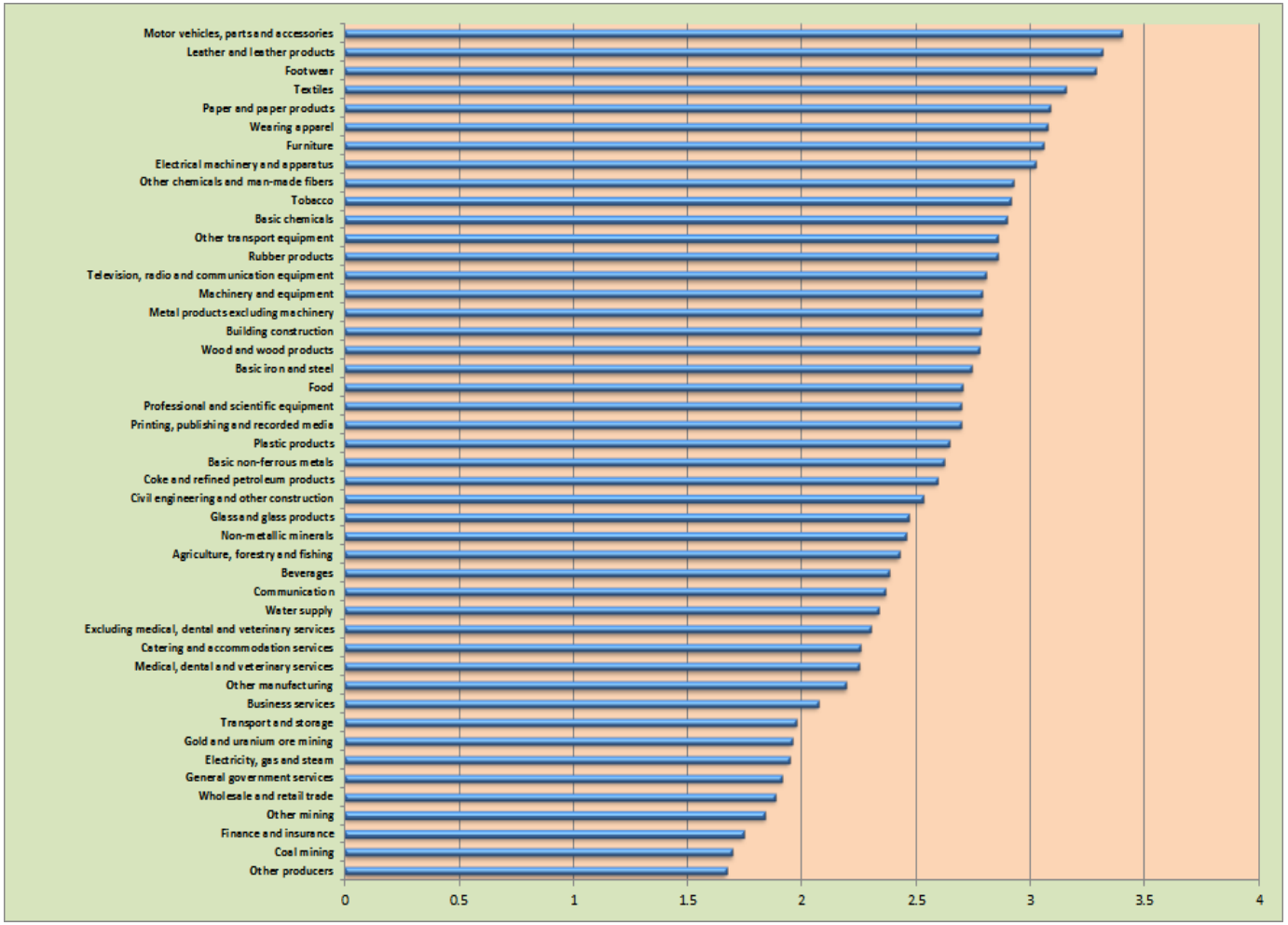
3. Industrial finance:
    - Stronger alignment and progressive strengthening of industrial financing across all DFIs - and within the Industrial Development Corporation (IDC) in particular – in order to secure an optimal mix of public and private sector funding that can progressively strengthen investment in the productive, especially manufacturing, sectors of the economy.
4. Developmental trade policy:
    - Ongoing strengthening of developmental trade policies; with the following key components:
        - deployment of trade measures such as selective and strategic tariffs and their improved alignment with industrial policy objectives; working closely with the International Trade Administration Commission (ITAC) while recognising their independent role;
        - closer and more detailed cooperation with the Customs Division of the South African Revenue Services (SARS) to combat the ever-present (and steadily growing) problem of illegal and fraudulent imports – one of the key pillars of the illicit economy;
        - steady and incremental strengthening of the capacity and capabilities of the Standards, Quality Assurance, Accreditation and Metrology (SQAM) institutions, which provide an indispensable support framework for a modern and competitive economy.
5. Competition policy:
    - Strengthened interventions to combat anti-competitive and collusive behaviour in both the private sector and State Owned Companies - and in so doing, lower the cost of procurement to the national fiscus and of wage goods to working families.
6. Regulation and intellectual property:
    - An Intellectual Property Rights (IPRs) regime that seeks to create a supportive environment for South Africa's industrialisation objectives. The regime should provide broad terms of scope for protection and less stringent criteria for novelty. Thus the recently signed Intellectual Property Amendment Bill enables the regime to strike a balance between encouraging incremental innovations, providing protection for indigenous knowledge and providing enough incentives for innovators to make the necessary research and development investments.
7. Innovation and technology:
    - New policies and programmes to ramp up competitive capabilities in the production and services sectors of the economy, taking advantage of every opportunity to leverage the quantum advances on offer in the sphere of digital and other globally emergent advanced technologies.

The focus on manufacturing

IPAP's central focus on manufacturing derives from a thorough analysis and understanding of its major attributes as a driver of balanced development. It is, as always, worth reiterating the benefits that a strong, well- diversified manufacturing sector brings to the economy as a whole:

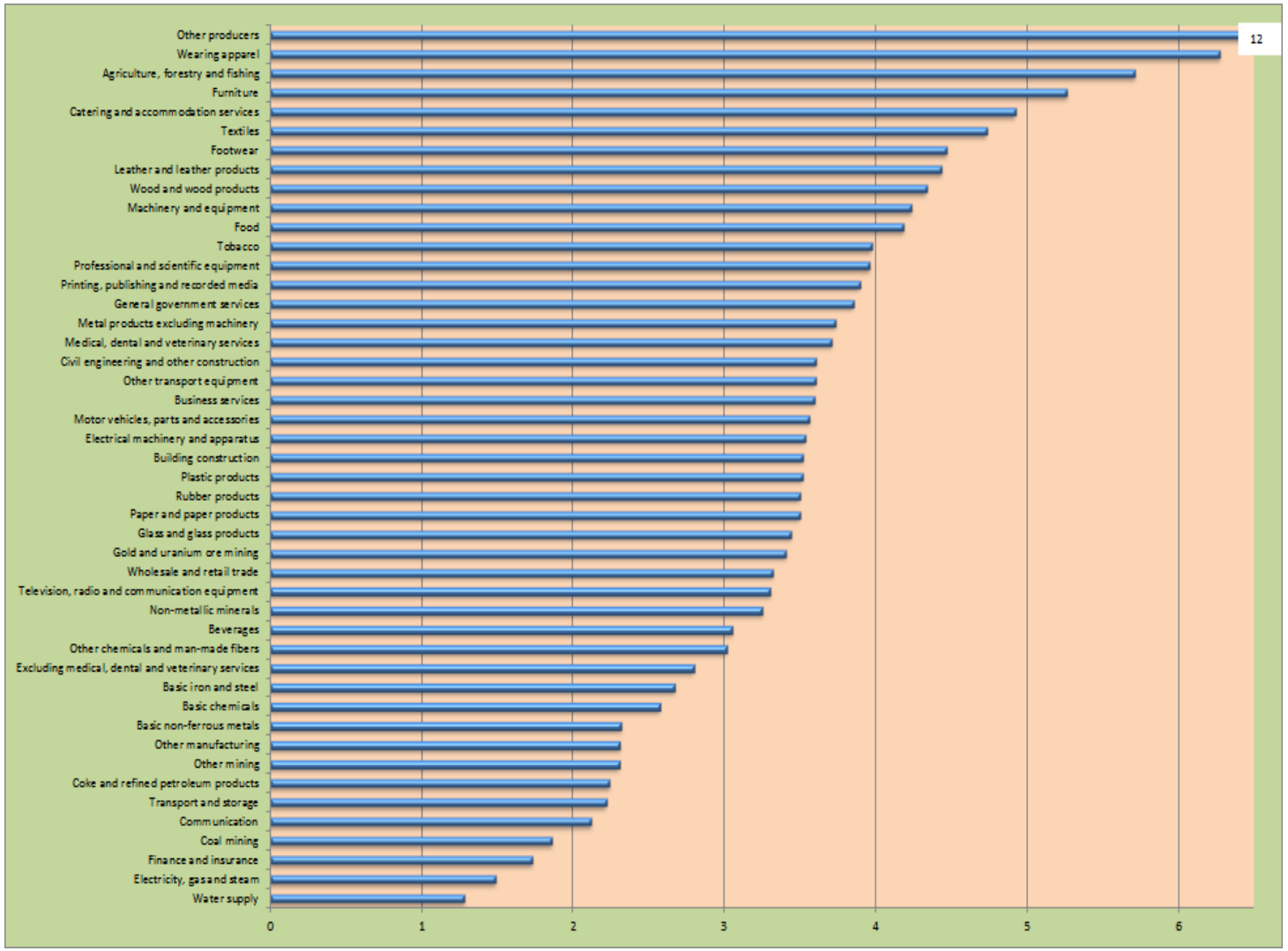
1. The manufacturing sector has the highest economic and employment multipliers of any sector. (See Figures 1 and 2). Backward linkages in manufacturing 'pull through' inputs from primary and other manufacturing and services sectors and transform them into higher-value added products, stimulating employment and economic linkages along the entire value chain. At the same time manufacturing provides an added impetus to employment and growth through forward linkages to 'downstream' sectors, including services.

Figure 1: Growth multiplier 2012



Source: the dti, using Quantec data

Figure 2: Employment multiplier 2012



Source: the dti using Quantec data

2. Manufacturing is central to our export strategy, based on value-added, labour-intensive tradable products that generate revenues which have both a significant positive impact on the balance of trade and impact directly on the non-exporting sub-sectors which form part of domestic value chains. It also reduces SA's vulnerability to commodity price fluctuations/volatility and alleviating "Dutch disease" type effects on the currency.

3. Manufacturing plays a critical and indispensable role as a driver of innovation and productivity growth. It should increasingly provide the capital goods and equipment inputs required for the infrastructure build programme which is central to SA's growth strategy - while, more generally, 'feeding' locally manufactured inputs into public goods, including transport, health, education and housing. An enhanced role for manufacturing in providing inputs to the infrastructure programme will also be critical in reducing its dependence on imports and mitigating wider vulnerabilities, particularly on the balance of trade.

4. The growth and strengthening of the manufacturing sector both requires and is a driver of more energy-efficient, less carbon-intensive growth. Greener manufacturing has a great potential contribution to make in limiting wasteful resource consumption and mitigating the environmental impact of economic development.

5. The manufacturing sector generates amongst the strongest forward and backward linkages across the economy, which are important transmission mechanisms for growth and poverty reduction. This underscores the crucial role manufacturing has in driving growth and employment levels. On the demand side, these linkages create indirect and induced jobs; on the supply side, the linkages come from knowledge and technological spill-over effects. Service inputs such as logistics, financial services, ICT, advertising, research and development, office support staff and so forth supports the manufacturing sector. The manufacturing-related services sector also tends to operate in much closer proximity to new technological frontiers, with innovation a key factor in driving both fresh demand and productivity gains across the entire manufacturing landscape.

The global economy and the manufacturing sector

The analysis provided below seeks to identify and analyse critical trends and dynamics that are relevant to the 'big picture' of domestic manufacturing. This picture is intentionally selective and not exhaustive, seeking to complement and refine key aspects of the analysis provided in previous IPAP iterations.

The global economy has begun to emerge, tentatively and unevenly across countries and economic zones, from the Great Recession precipitated by the financial crisis of 2008. There will, by many accounts, be no quick return to sustained and strong growth in the global economy; whilst world output is predicted to remain muted over the medium term.

This includes slow growth and decreased demand in SA's traditional trading partners, the Eurozone, the UK and the US. [The Eurozone averaging a barely positive 0.1% over quarters 1-3 of 2013 both the UK and the US averaging just 1.9% growth over all four quarters of 2013 (the UK up from 0.3% in 2012; the US down from 2.8% in 2012, though showing some recovery - to 3.2% - in Q4 2013].

The Great Recession has both revealed and intensified emerging structural changes and shifts in the balance of economic growth and power in the global economy. Developing economies are predicted to continue to grow at a significantly faster rate than the developed economies, though that growth will be relatively muted (compared with pre-2008 levels) precisely because of the persistence of depressed demand in the economies of the North. Developing countries are thus of necessity increasingly focussing on expanded domestic demand and rapid structural change up the value chain. A 'new pattern' of global growth is emerging, which places SA, along with many other emerging economies, in a situation where it must seek to maintain its trade with its traditional trading partners whilst simultaneously building stronger trade links and enhanced export performance in relation to other emerging economies of the South.

What this tells us, from a policy point of view, is that it is essential that we build sectors and companies that can compete against imports in the domestic economy and more effectively penetrate international export markets. (This is further discussed below, in the section headed 'Manufacturing exports').

Structural imbalances in South Africa's current growth path

South Africa achieved reasonably high growth rates during the 2005-2007 period. But even in this period its growth trajectory was (and remains) encumbered by structural imbalances. Pre-dating the onset of the recession – and despite the fact that South Africa did not experience a significant commodity boom – the domestic economy has continued to attract massive short-term capital inflows into domestic resource and equity shares and the bond market as a direct result of high real interest rates relative to other developing countries. This contributed to preventing the exchange rate from playing its role as a stabiliser of the productive sectors of the economy. Latterly, while the exchange rate has weakened significantly, ongoing currency volatility remains a serious problem.

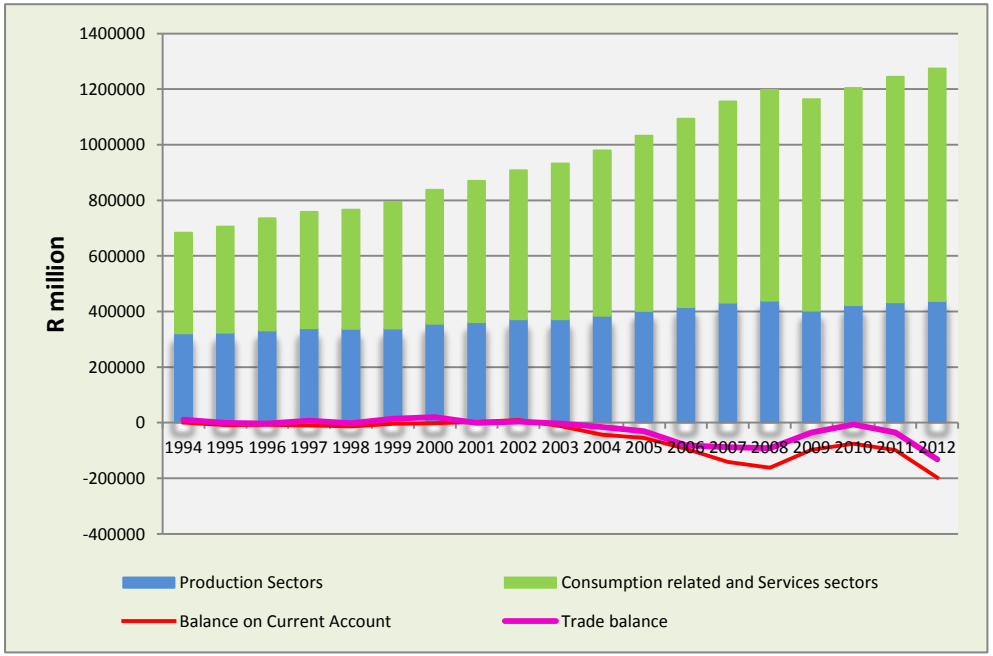
At the same time, SA's exports remain predominantly commodity-based, while the country's 'export basket' continues on the whole to be characterised by low levels of value addition. This is in distinct contrast to the situation in a number of other developing countries where policies have been implemented that focus much more strongly on growing the production sectors. The results, for some of these countries, have been both a significant cushioning of the effects of the global economic crisis and the achievement – e.g. in Brazil - of some striking successes in ameliorating poverty and reducing inequality.

South Africa, by contrast, has essentially been 'treading water'. The medium-term outlook is for growth to improve gradually but for the recovery to be less robust than previously forecast. Real GDP growth is projected to recover to 2.7% in 2014 - from the estimated 1.8% in 2013 - and to reach 3.4% in 2015. Looking slightly further ahead – and in a continental perspective – SA's real GDP growth is expected to remain well below the average of 5.4% projected for Sub-Saharan Africa in 2014–16.

If the South African economy is to overcome this lacklustre performance, we must begin to make a decisive break with the entrenched growth model – previously driven by increases in private credit extension and consumption - and move onto a more sustainable path underpinned by growth in the productive and employment creating sectors of the economy.

Figure 3 below clearly illustrates the continuing predominance of the consumption-driven sectors (finance and insurance, real estate, transport and storage, communication, wholesale and retail, catering and accommodation, security services) over the main production-driven sectors (agriculture, mining, manufacturing, electricity and water, and construction). This has had a negative impact on both the current and trade accounts which is demonstrated by the deficits on both. This necessitates a dependence on foreign capital inflows.

Figure 3: GDP by production and consumption sectors, Trade balance and Balance on Current Account at constant prices

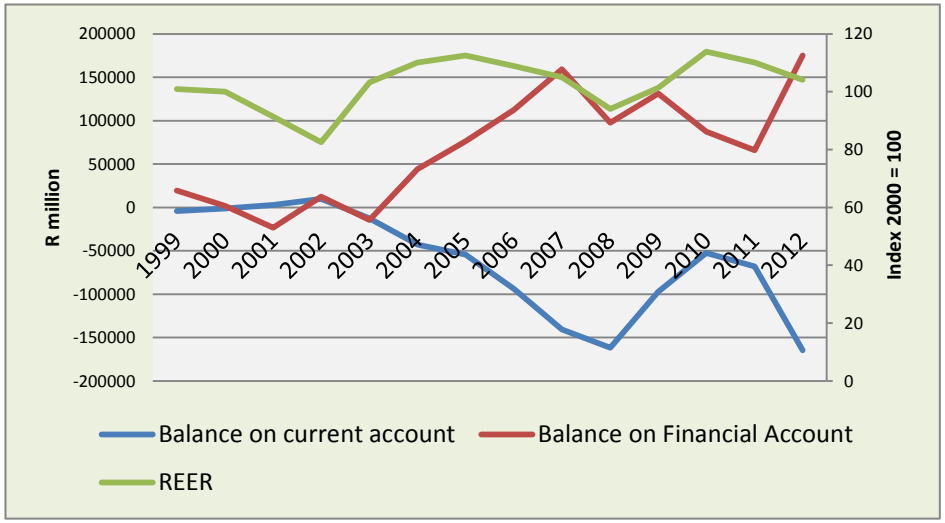


Source: SARB

The Real Effective Exchange Rate (REER), which is a measurement of the Rand's performance against a basket of currencies, declined by 15.2% from March 2012 to September 2013. This, in principle, has the potential to give new impetus to price competitiveness, notwithstanding developments in other emerging markets.

Figure 4 below illustrates how the REER has affected the current account and clearly indicates how it is being financed by capital inflows via the balance on the financial account.

Figure 4: Balance on current account, financial account & real effective exchange rate



Source: SARB

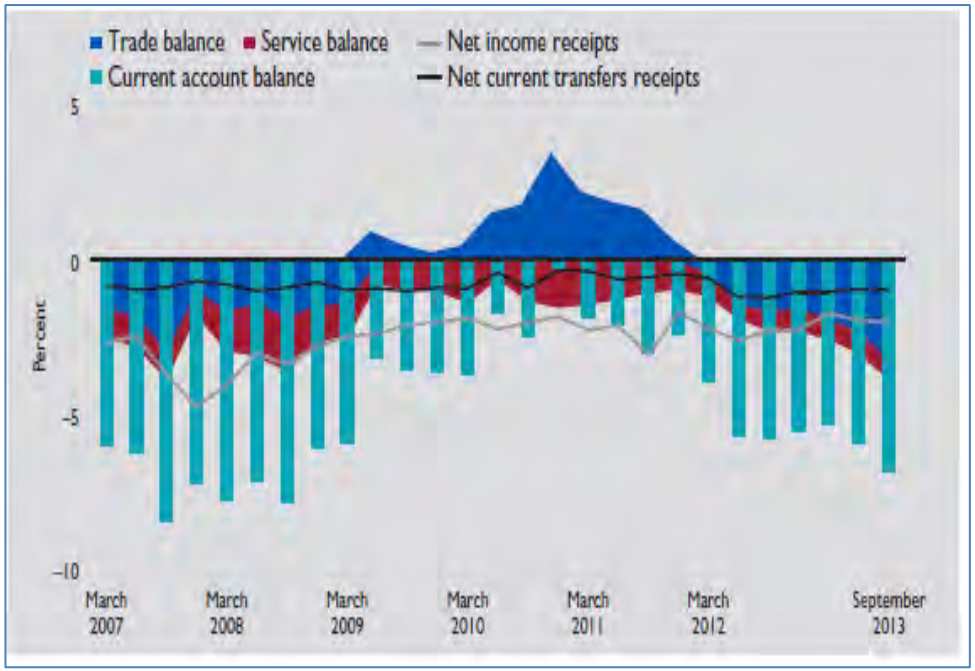
Clearly, developing a stronger export-competitive dynamic cannot be a quick and straightforward matter. Value-added manufacturers have indeed not yet responded particularly strongly to the recent depreciation of the currency. This relative non-responsiveness – taken together with the large current account deficit - has been interpreted by many economic commentators as proof that SA manufacturing is *fundamentally uncompetitive* - without taking into account the debilitating impact of long periods of overvaluation followed by sudden sharp depreciations.

In this context, the relatively weak response to the recent depreciation is unsurprising. Manufacturing is based on building up capabilities over considerable periods of time. Long periods of overvaluation and volatility have had a major cumulative effect on investment in equipment and capabilities, leading to a significant overall weakening of the industrial base. When inevitable "corrections" occur, manufacturing does not respond like a tap that can be turned on and off at will. Manufacturers do not plan only for periods of depreciation; they know well from experience that any depreciation is likely to be followed in due course by periods of appreciation to which they will have to find carefully planned, long term competitive responses.

At present, therefore, the continuation of a 'mixed' pattern of responses to currency devaluation should be seen as a reflection of the ongoing struggle to adjust, re-tool and reinvest – in the light of a very challenging past five years of uncertainty and volatility compounded by severe external and domestic shocks.

Meanwhile, South Africa's ballooning current account deficit continues to expose serious macroeconomic vulnerabilities, especially given the role of short-term capital inflows in financing it. As illustrated in Figure 5 below, the current account deficit widened to a post-crisis high of 6.8% in Q3 2013 (mainly driven by high demand for capital inputs related to the public investment programme, higher oil prices and the impact of the depreciating Rand); while at the same time imports continued to outpace exports, pushing the trade deficit up to 3.2% of GDP.

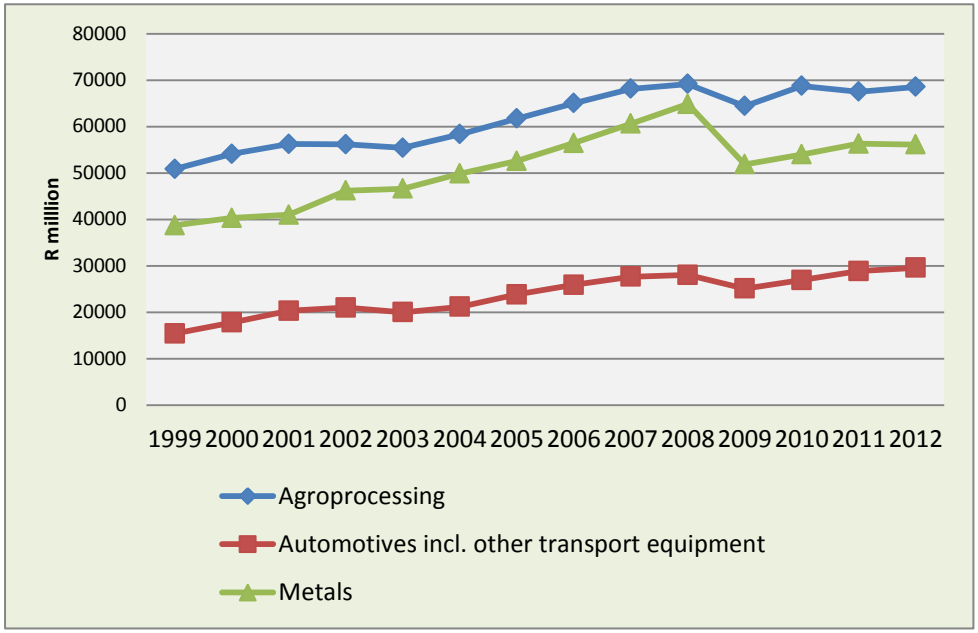
Figure 5: Current account & trade balance trends 2007-2013



Source: World Bank

Since the advent of targeted IPAP interventions - over and above broader industrial support measures across sectors – a stabilisation in value addition in these sectors has been observed. Figure 6 demonstrates how selected lead sectors (agro-processing, automotives incl. other transport equipment and metals) have performed over time.

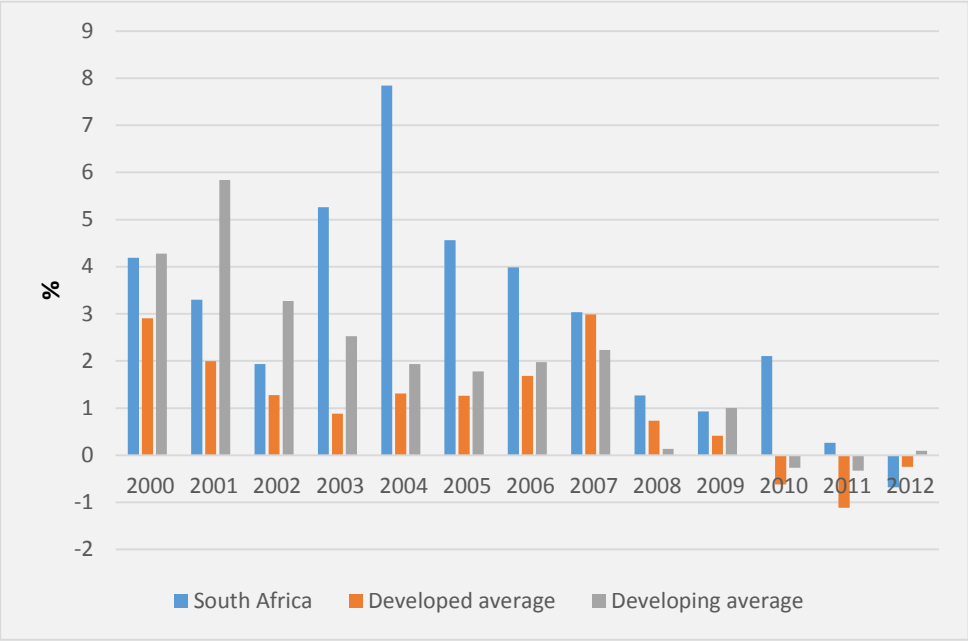
Figure 6: Value-add by selected IPAP sectors



Source: Quantec

Despite the massive growth in credit extended to the private sector, only a tiny proportion has been extended to fixed capital investment: 5.6% in 2011 and 5.5% in 2012. South Africa's relatively high real interest rates have started to compare more positively with those of our main peer competitors. For the first time in many years in 2012 our short term real interest rates were negative. The decline in the real cost of capital in figure 7 has the potential to start creating new impetus for expansion in the manufacturing sector. However the decline in the real cost of capital may not be a panacea for the expansion of the manufacturing sector, if there is insufficient demand and wide ranging competitiveness challenges are not addressed.

Figure 7: Short-term real interest rates in South Africa and major developed and developing economies

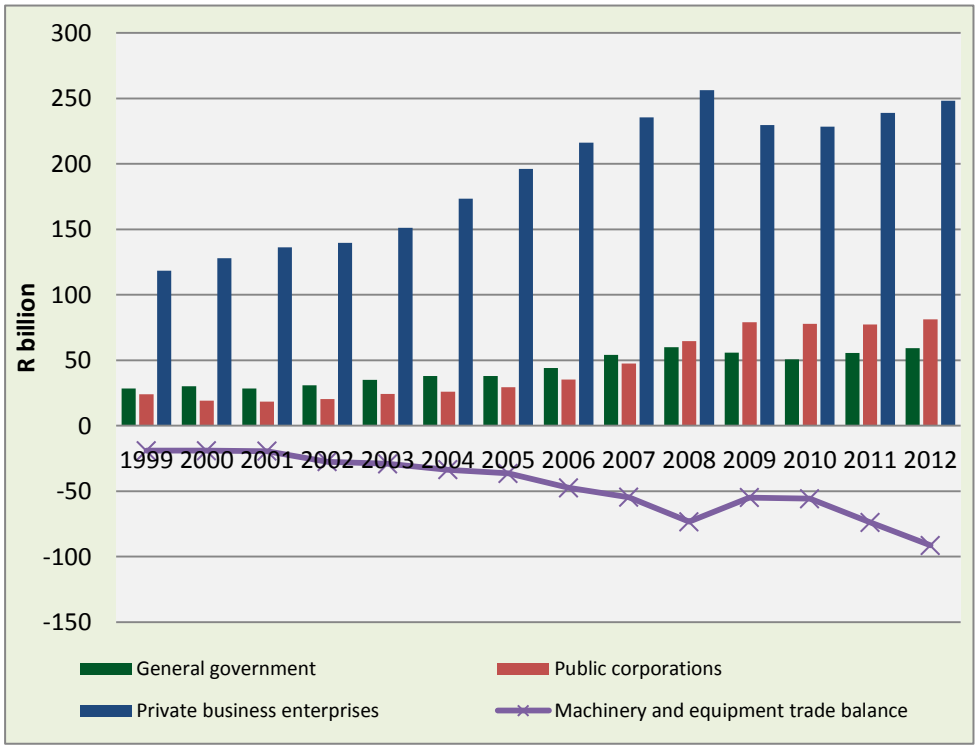


Source: Quantec

Figure 8 shows a general increase in gross fixed capital formation by general government and public corporations over the period. Indications are that public investment has picked up and is set for significant increases, driven by the Presidential Infrastructure Coordinating Committee (PICC).

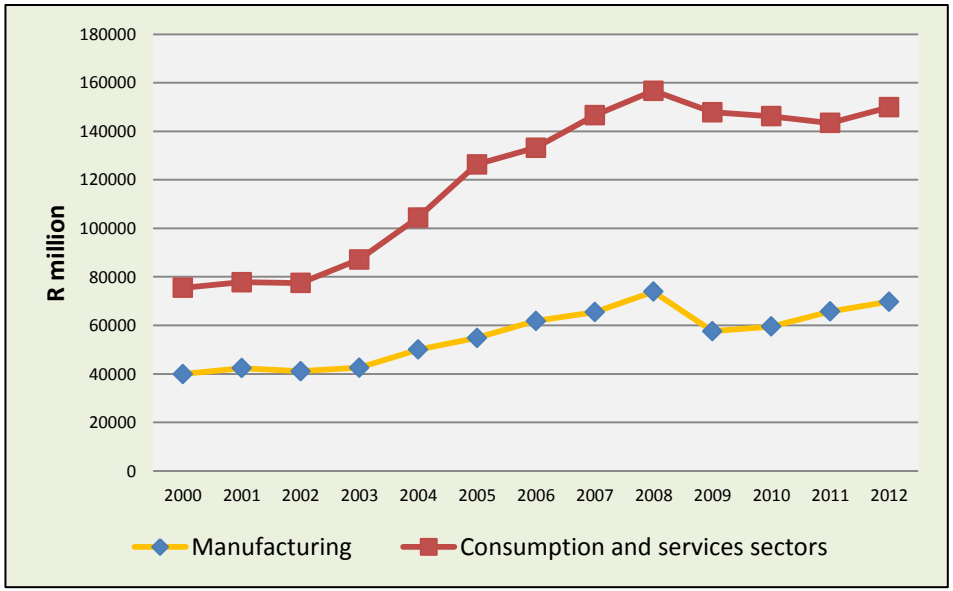
Figure 9 indicates fixed capital formation by manufacturing and consumption and services sectors. It shows that the bulk of fixed investment is by the consumption related sectors compared to the manufacturing sector. This points to the need to urgently upscale gross fixed capital formation within the manufacturing sector if we are to make a significant dent in the performance of the sectors.

Figure 8: Gross Fixed Capital Formation and machinery & equipment trade balance



Source: SARB

Figure 9: Real gross fixed capital formation at constant prices

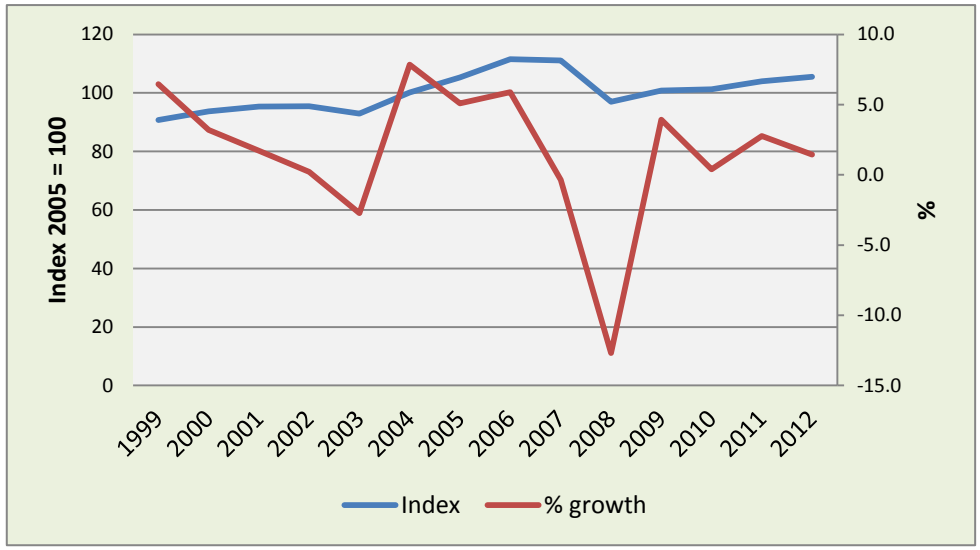


Source: SARB

Manufacturing performance

In 1994 the manufacturing sector made up 21% of GDP, steadily declining to 12.4% in 2012. Year-on-year manufacturing growth recovered tentatively during 2010 onwards. The volume of manufacturing production seasonally adjusted grew by 0.4% year-on-year in 2010, by 2.8% in 2011 and 1.4% during 2012. In 2013 the overall picture remained uneven and unsteady.

Figure 10: Manufacturing Production and Growth seasonally adjusted

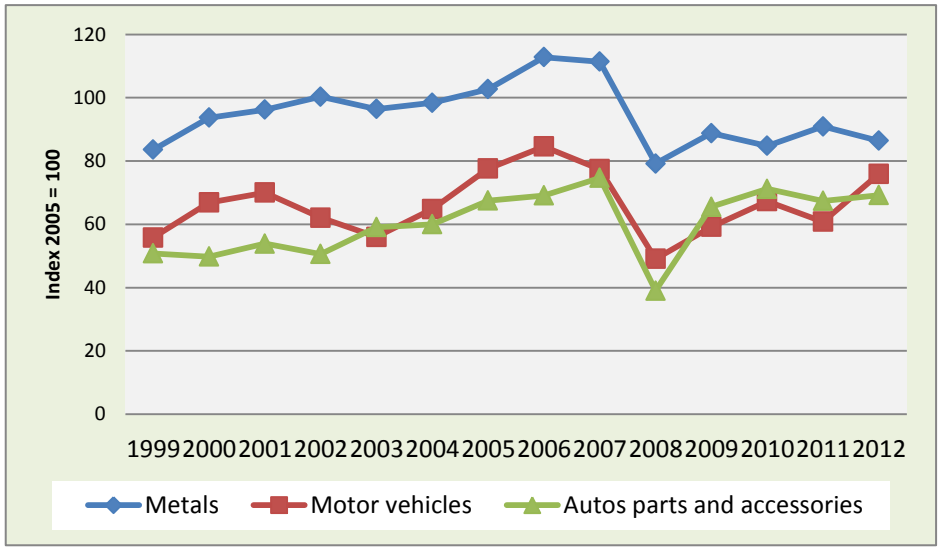


Source: Quantec

As illustrated in Figure 10 above, the major impact of the global credit crisis which started in 2007 spilled over to the real economy in 2008, with the manufacturing sector bearing the brunt of the impact. The recession started in 2009 with a 6.4% reduction in manufacturing production (output) and a 10.1% contraction in its GDP. It was, however, during this same period that countervailing IPAP interventions started to be implemented.

While precise correlation between these interventions and recovering performance in key IPAP sectors is difficult to pin down, from 2010 onwards sectors such as metals, motor vehicles and automotive parts and accessories showed fairly steady improvement in their levels of production. (See Figure 11 below).

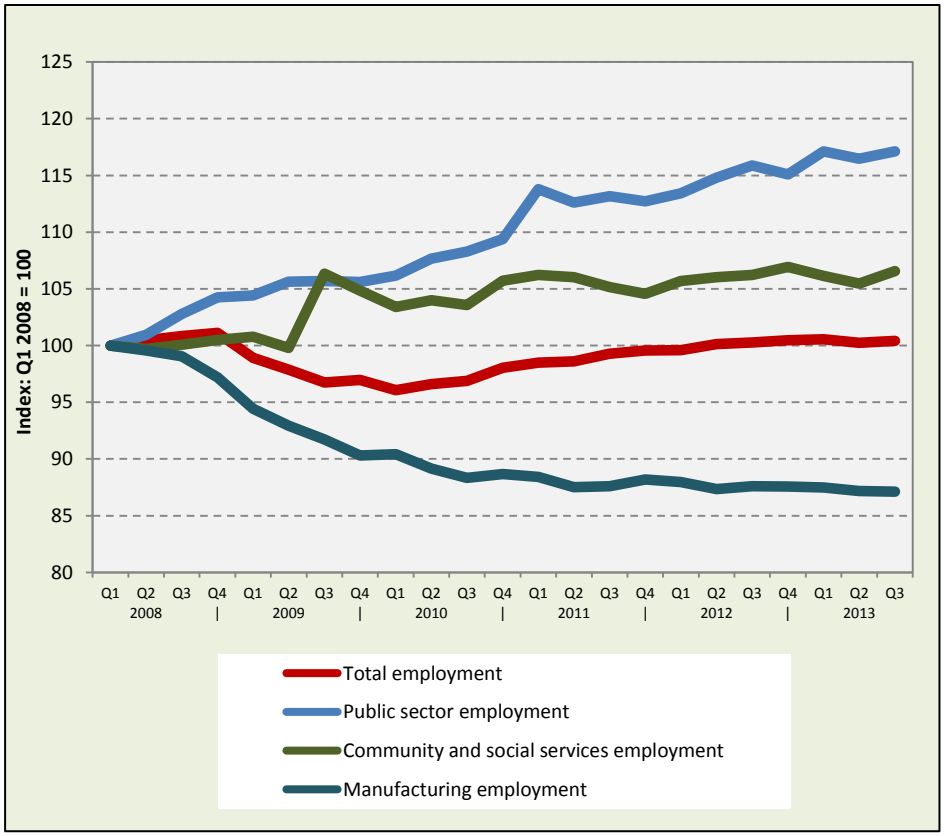
Figure 11: Manufacturing Production of IPAP sectors



Source: Quantec

On the employment front, however, the picture for manufacturing remains very disquieting - as illustrated in Figure 12 below. During the recession the economy shed around 1 million jobs with 200 000 jobs being lost in the manufacturing sector. Formal employment growth continues to come predominantly from the services sector, particularly wholesale and retail and the business services sub-sectors. In 2010, manufacturing employment briefly rebounded from its steep post-crisis downward path; but the recovery was short-lived and employment levels have steadily continued to fall. The decline in manufacturing employment levels can be attributed to a range of structural problems set out in IPAP.

Figure 12: Employment in the formal non-agricultural sector



Source: IDC

Manufacturing exports

Manufactured goods constituted 51.6% of the merchandise export basket in 2012, up from 41.2% in 1994. A few sectors are the main contributors to this trend: machinery & equipment, motor vehicles (including components for auto assembly); refined petroleum products and other chemicals. Manufacturing exports are highly concentrated, with the top 20 manufacturing sub-sectors (out of 120) accounting for 77% of SA's manufacturing export basket in 2012 and – even more strikingly – the top 5% of South African export companies accounting for more than 90% of total exports.

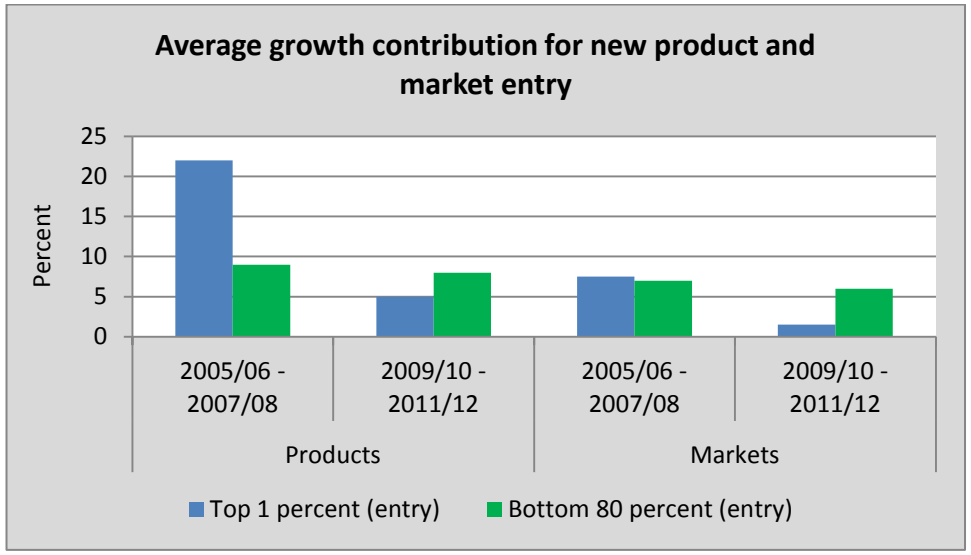
The other side of this coin – as pointed out in a recent World Bank Report on South African export competitiveness[1] - is the fact that at present the vast majority of South Africa's exporting firms (more than 21,000 of them) are operating on a very small scale, with the median exporter earning just $29,000 per annum from exports - by far the lowest earnings level amongst our peer countries.

One unusual feature of this imbalance, however, is that current evidence points to relatively greater dynamism and innovation amongst the 'minnow' exporters than on the part of the so-called 'super-exporters'. As the World Bank Report notes:

> "While the top 1 per cent of exporters grew fastest across all regions in the pre-crisis years, the situation has since reversed. The largest exporters have grown the slowest, and some have declined, reflecting losses in existing products and markets and less success (or less ambition) with new product introduction.
>
> The top 1 per cent of firms has seen a sharp drop in the contribution of new products to their markets in recent years [See Figure 13 below].
>
> Since 2010 the share of total exports (among the top 1 per cent of exporters) coming from firms selling 10 or more products has fallen from 73 per cent to just 64 per cent. By contrast, smaller exporters are expanding in both products and markets. However, the high concentration in South Africa's export sector means that the net impact of increased dynamism at the bottom end of the market fades into insignificance against the super-exporters' retreat from experimentation."

[1] *South Africa Economic Update: Focus on Export Competitiveness*, World Bank Group, Africa Regional Poverty Reduction and Economic Management, Issue no.6, February 2014, p.21

Figure 13 Declining experimentation and competitiveness of SA's major exporters (v. small exporters)

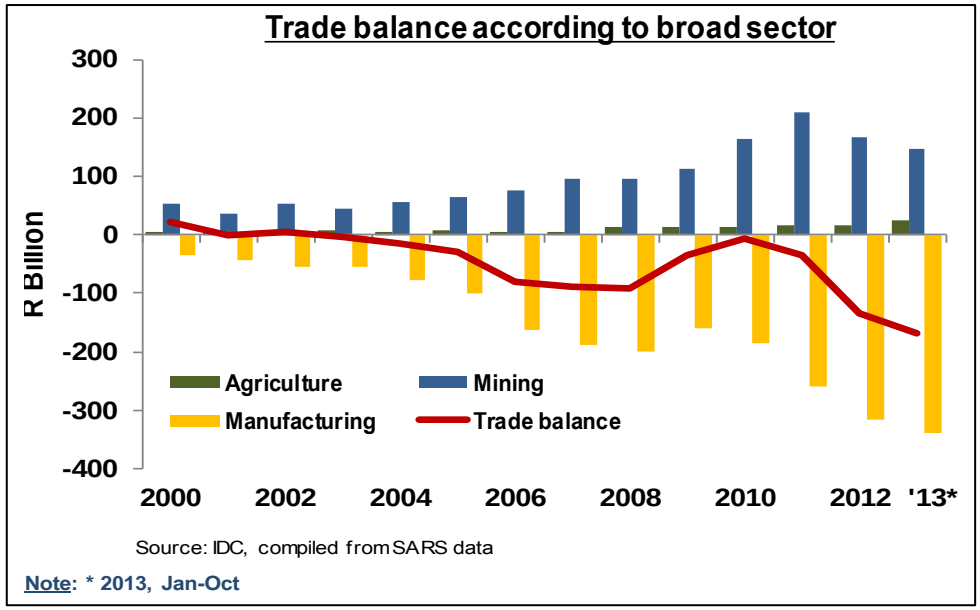


Source: Adapted from World Bank graphic, based on SARS data

Overall, the unevenness in our export performance – reflected in the persistent and growing trade deficit in the manufacturing sector - underscores the fact that the imbalances in our manufacturing export profile have now become a major structural concern for the SA economy as a whole.

As can be seen from Figure 14 below, the manufacturing trade deficit increased sharply from 2010 onwards , in part (but not only) due to weak export demand. The more pertinent question to pose here – bearing in mind the discussion above - is: 'Weak demand for what *kinds* of export products, in which markets, in what categories, at what volumes and quality levels?'

Figure 14: Trade balance by sector



Source: IDC compiled from SARS data

Critical new initiatives

All the discussion above points inescapably to the need to strengthen support measures and to introduce considerably stronger performance requirements in relation to industrial financing and other manufacturing support mechanisms; and that we build greater coherence between these instruments and support packages. Getting such a support base in place will require the following important steps:

- Achieving much greater coherence between industrial financing mechanisms: particularly the Industrial Development Corporation (IDC), the Export Credit Insurance Corporation of South Africa (ECIC) and **the dti**'s Industrial Development Incentive Administration Division (IDIAD).
- Imposition of stronger performance requirements and *quid pro quos* in relation to industrial financing.
- A strong focus on tackling the current account deficit through a combination of import replacement and export promotion.
- A particular focus on exports into the rest of the continent, in the context of the drive for regional industrial integration.

While IPAP 2014 will be pushing hard on all these fronts, it will also be addressing a very important issue that touches on the lingering inheritance of apartheid: namely, the skewed and unrepresentative social composition of manufacturing capital. There is a simple question that has to be answered: "Why do we still have no significant base of black industrialists?"

Recent research work on the metals and machinery sector has clearly revealed that the vast majority of BEE initiatives and deals have to date been largely based on emulation of practices in the ('white') financial sector. Emerging BEE groups have been expanding through shallow shareholdings across multiple sectors rather than deep shareholdings in productive sectors. Much of this investment has taken a private equity form, with a short term investment perspective and the expectation of exit within 5 years (or even less) with substantial profits. The lack of ''deep entrepreneurship' by black investors in manufacturing is one of the most salient reasons why the voice of manufacturing is not heard loudly enough in policy debates in South Africa.

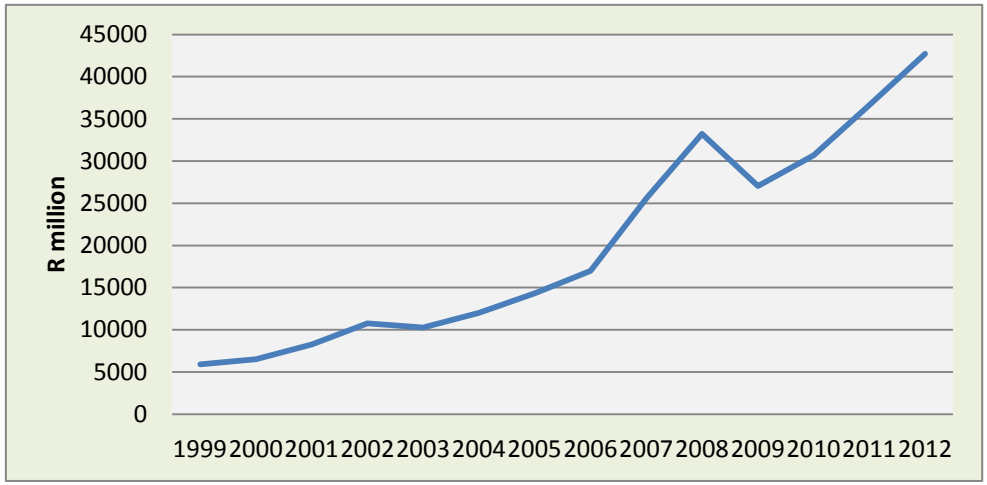
This clearly needs to become a strong focal point of work going forward; to include, perhaps, the following sorts of measures:

- Providing support for industrialists who are committed to long term participation in manufacturing through a combination of majority ownership and active management.
- Development of targeted industrial financing instruments for black industrialists to acquire *majority* control of manufacturing enterprises, either through new investments or acquisition.
- Development of related support programmes such as a dedicated MBA to develop black managers and owners in manufacturing.
- Getting DFIs to take this objective on board very seriously – through specific financing by the IDC and reorientation of the National Empowerment Fund (NEF) to prioritise support for black industrialists.

Regional export reorientation

South Africa's trade with the rest of the African continent is a fast-emerging 'bright spot' in the overall export picture as exports of manufactured goods to Africa in 2012 surpassed that of manufactured exports to the EU. It continues to increase at a good pace, with total exports into Africa more than doubling from R100 billion in 2008 to over R200 billion in 2012. Figure 15 below shows exports to Africa in the mining, metals and capital equipment sectors, where growth has been steadily on the up since 2006.

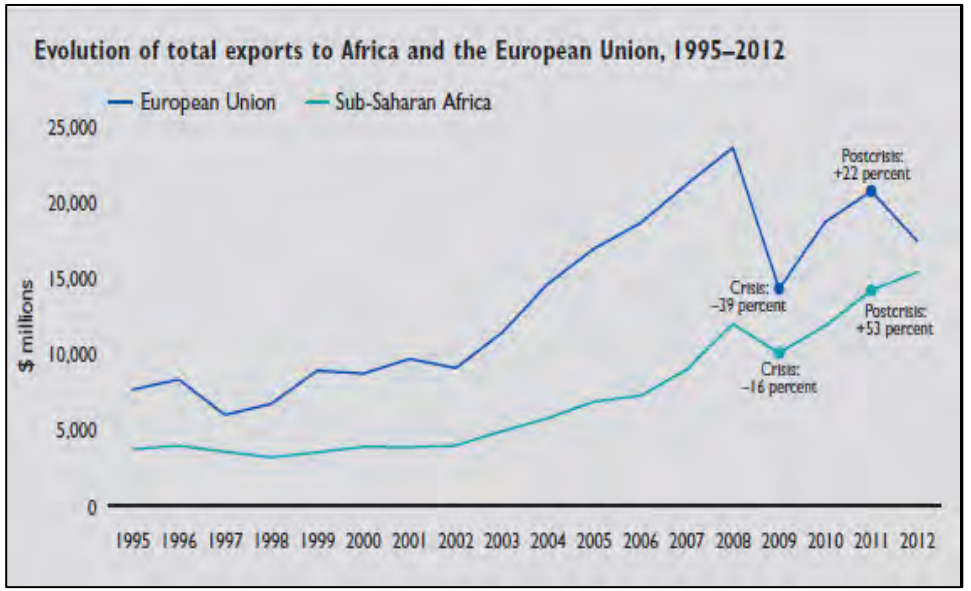
Figure 15: Exports to Africa in mining, metals and capital equipment



Source: Quantec

The emerging long-term secular trend in the pattern of South Africa's trade is clearly a gradual movement away from heavy dependence on the countries of the North and a re-balancing that gives much greater weight to South-South and African regional trade. As Figure 16 illustrates, the gap in the value of trade with the EU and Sub-Saharan Africa has been rapidly narrowing – to a point where, by the end of 2012, convergence was close to being reached.

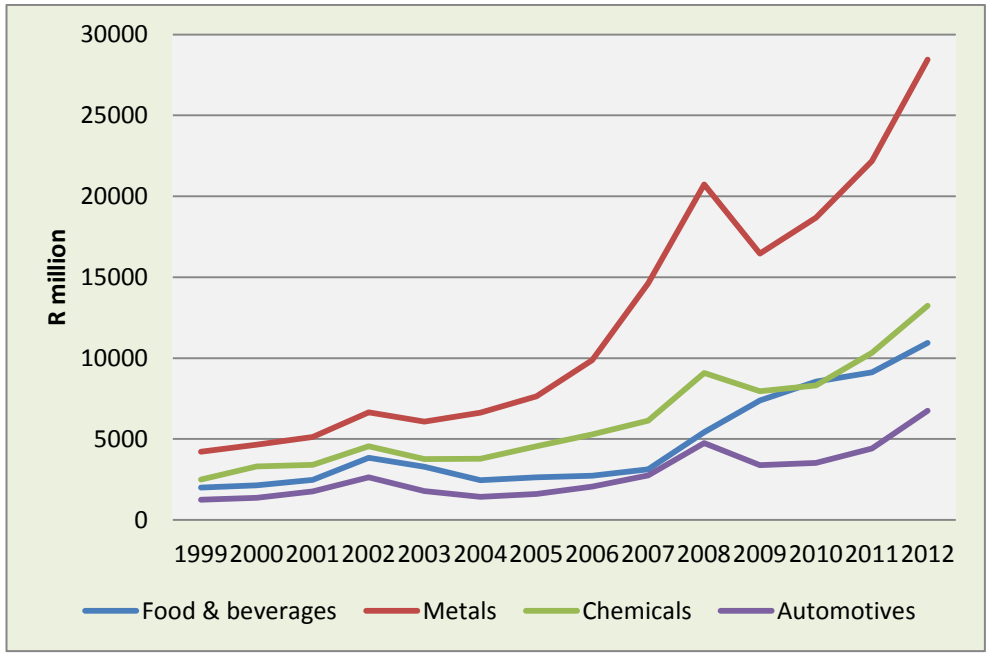
Figure 16: Exports to European Union and Sub-Saharan Africa



Source: World Bank

In percentage terms, over the past decade or so, SA's non-mineral exports to Sub-Saharan Africa grew from 19% to almost 29%, overtaking exports to the European Union (down from 41% to 28%). Sub-Saharan Africa now accounts for around half of SA's non-mineral exports; while at the same time non-mineral exports to our BRICs partners have almost doubled: up from 5% in 2000 to 9% in 2012. As shown in Figure 17 below, exports to our near neighbours in the SADC countries have shown particularly strong growth; though it is worth remarking that this 'basket' could be widened and deepened beyond the current over-concentration in four particular sectors: food and beverages, metals, basic and other chemicals and automotives.

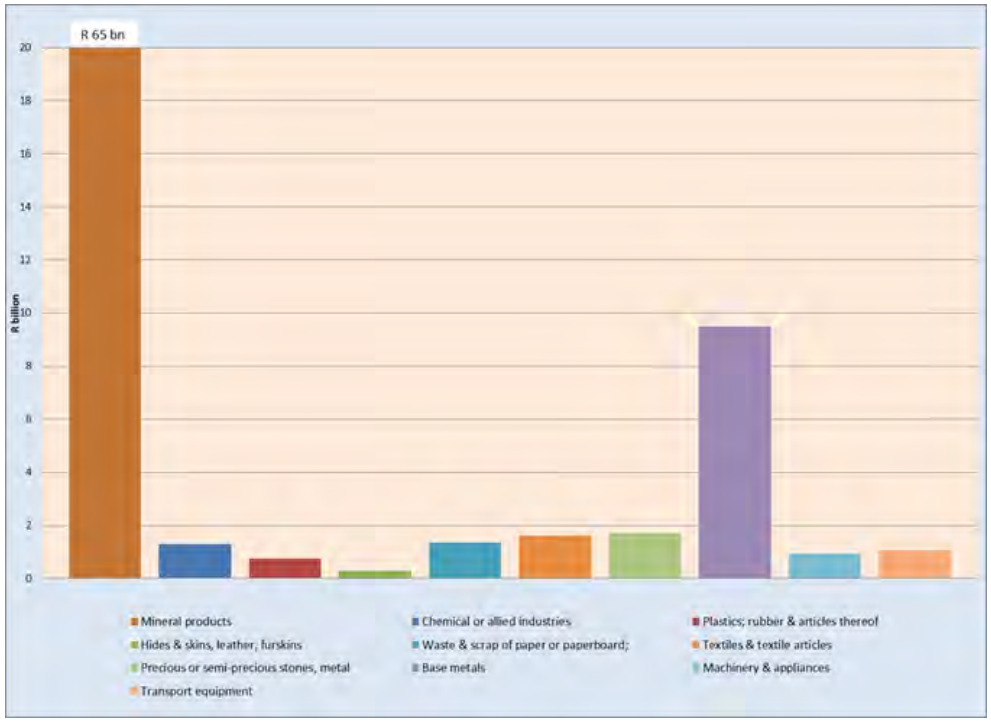
Figure 17: Exports to SADC of selected sectors (R million)



Source: Quantec

Whilst exports to Africa and SADC are at least to some extent diversified and offer significant opportunities for growth, exports to the emerging, fast growing countries of the Middle and Far East (particularly China) are heavily concentrated in primary commodities. In 2012, for example, out of total exports to China valued at R84.7 billion, mineral exports accounted for R65 billion, with base metals far behind in second place at R9 billion. Exports of iron ore to China in the same year was 47% of merchandise exports. Furthermore China has the intention to re-balance its economy which has implications for SA exports: demand from China is gradually changing from investment-driven growth towards consumption-driven growth.

Figure 18: SA's exports to China in 2012



Source: the dti

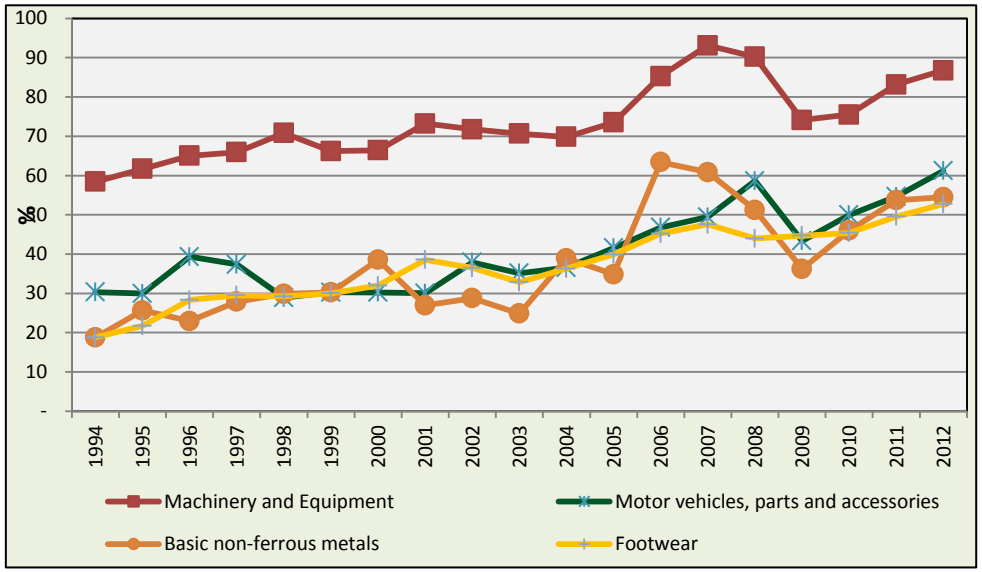
While the commodity-heavy bias of SA's exports to China is glaringly apparent, so too is the reverse pattern of import penetration. South Africa's trade deficit with China increased from R36 billion in 2012 to R38 billion last year. Over 90% of SA's top 10 exports to China were in raw materials, while 100% of our top imports from China were manufactured products. In joint consultation, however, both countries have recognised that this is not sustainable. (See BRICS perspectives below, p.33).

On the other hand, however, between January 2003 and January 2014, 38 Chinese FDI projects were recorded, representing a total capital investment of R13.33 billion – an average of R350.48 million per project – creating 10,992 jobs.

Another serious issue for SA manufacturing is the economy's continuing reliance on imported capital equipment and intermediate inputs. There are two main reasons for this: lack of appropriate domestic capacity in key areas of the capital goods sector and the ingrained tendency of many procuring entities to persist in favouring imports, even where domestic inputs are available and competitive. Figure 19 below demonstrates the share of domestic demand being satisfied by imports for manufacturing.

The machinery & equipment sector has the highest share at 90%, whilst other sector shares have steadily increased to above 50% from a low base.

Figure 19: Import share in domestic demand of selected sectors (Percentage)



Source: Quantec

Taken together, all the above trends offer some important lessons:

1. Industrial policy is working where it is properly resourced and underpinned by solid research and stakeholder engagement. Our continuing strategic approach must therefore be to intensify support for value-addition, with a strong focus on developing our tradable and labour-intensive sectors to support, strengthen and further diversify our manufacturing base so that it is better placed to cope with global headwinds and domestic shocks and constraints going forward.
2. This will necessarily require continuing, up-scaled industrial policy interventions - including export promotion and targeted financing – to provide sustained support for sectors that are both globally competitive and positioned to maximise the benefits and opportunities arising from SA's measured South-South reorientation, BRICs membership and geographical proximity to Sub-Saharan markets.

CONSTRAINTS AND THREATS

South Africa still faces many serious challenges on its road to re-industrialisation. The implementation of IPAP continues to go forward under the shadow of uneven and hesitant global economic recovery and against a set of deep-seated domestic structural problems and constraints. These include:

Administered prices

There is an urgent need for Government to step up its efforts across departments to develop a methodology for establishing more rational and consistent administered prices, both for consumers and (especially) industrial users. This must strike an economically and socially sustainable balance between the different goals and modes of financing, the user-pay and other principles and the range and quality of services provided.

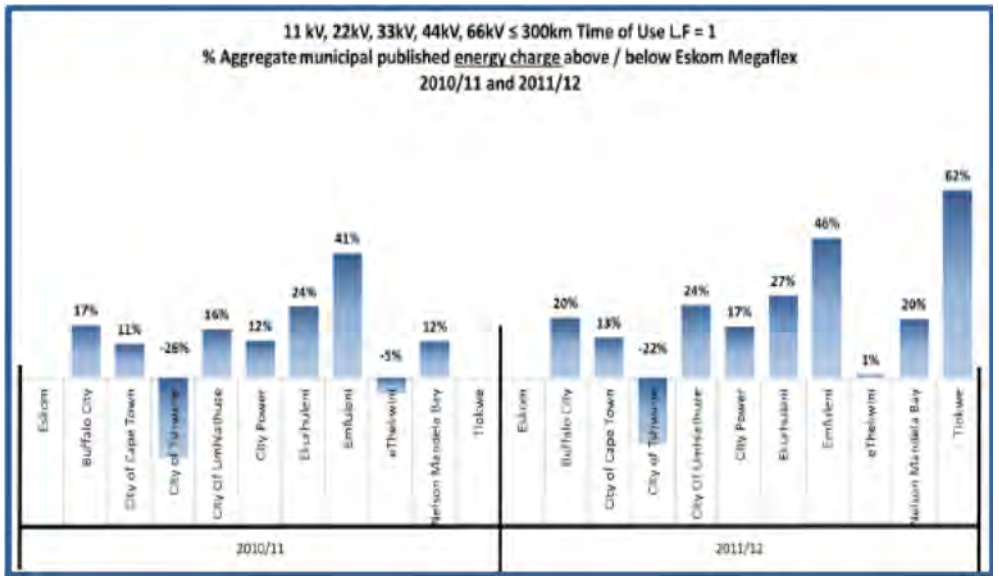
Sharply escalating and 'bunched up' administered prices – most notably, electricity and port charges and inefficiencies. The graphs below give an indication of the scale of the problems and – in the case of broadband – the impact on penetration. Since in every case these prices have major implications for the growth capacity and competitiveness of the manufacturing sector, it is critical that the tariff determination policy on these prices be urgently revised.

Electricity: the security of electricity supply and interruptions; Eskom price hikes and of major and increasingly acute concern are the triple-digit premiums added on to Eskom prices by municipalities implementing a local government funding model based on both cost recovery and revenue generation from electricity. This is often compounded by significant inefficiencies and inconsistencies within and between municipalities and billing problems and inconsistencies. Industrial competitiveness deteriorates relative to national and global counterparts in other jurisdictions with the loss of volume or plant closure resulting in reduced shifts and ultimately job losses. A consequential reduction in electricity sales to some or all municipal residents reduces the amount of revenue any particular municipality is able to collect now and in the future; tempts municipalities to increase tariffs to reduce the shortfall and raises moral hazard

Furthermore investment attractiveness decreases with very significant increases of operational expenditure attributed to electricity. This downward spiral creates numerous problems for municipalities, including further reducing revenue. From an industrial perspective: electricity accounts for a far greater percentage of operational expenditure across all industry sectors.

The situation is worsened by the escalating expense experienced by customers supplied by municipalities – considerably higher than if they were supplied by Eskom. Far greater electricity costs, especially for medium and small companies in vulnerable sectors such as foundries; means that municipal customers have and are increasingly becoming less competitive than Eskom-fed competitors. This situation has very negative and unintended consequences, including acting as an incentive for irrational behaviour, such as moving to an Eskom-supplied zone or another country.[2]

Figure 20: Municipal profit margins for demand charges charged above Eskom Megaflex



Source: EIUG

[2] Adapted, with acknowledgement, from the Energy Intensive Users Group of SA's *Municipal Tariffs Study*, Sep. 2012.

A range of possible measures therefore needs to be urgently considered by government to rationalise municipal electricity tariffs and iron out inconsistencies and inefficiencies in and between municipalities.

Water supply and availability: An increasingly serious problem that needs to be addressed is recurrent interruption of water supply, especially in smaller municipalities and to small and medium companies.

Port tariffs: High port charges are a significant barrier and constraint for the export of value-added goods. The cost of export of value-added tradable goods has for some time now been higher than both the cost of exports of primary commodities and the import of tradable goods.

As illustrated in Table 21 below, South Africa has one of the highest levels of port tariffs for containers and automotives in the world; from more than double to almost four times the global average. At the same time, it is to be noted that South Africa's port tariffs for iron ore and coal are significantly *lower* than the global average. This is a perversity: port tariffs for primary commodities should be *higher* than for manufactured products, because they embody no manufactured value-add (MVA).

Figure 21: South African port tariffs v. global average

		Tariff		
Tariff category	Global average		South Africa	South Africa's premium or discount on the global average (%)
Container	$62,414.90		$287,217.80	360.2
Container(with rebate)	$62,414.90		$245,913.20	294
Automotive	$92,682.80		$300,253.60	224
Automotive (with rebate)	$92,682.80		$289,560.70	212.4
Iron ore	$257,113.20		$208,489.90	-18.9
Coal	$124,307.80		$71,049.60	-42.8

Note: Comparisons are based on a set of assumptions (standardized across ports included in the study) with regard to vessel size, load size, services, and the like

Source: Ports Regulator of South Africa 2012

The cost of export of value-added tradable goods has for some time been higher than both the cost of exports of primary commodities and the import of tradable goods. This is mainly because In recent years SA Manufacturers have essentially been 'subsidising' other TNPA operations – a situation that is in direct contradiction to government's policy commitment (under the NIPF/IPAP and NGP) to support the export of manufactured goods to achieve a range of wider economic benefits, including improving the balance of trade.

However, the commitment made by the Transnet National Ports Authority (March 2013) to change its pricing model in favour of the export of manufactured goods by lowering tariffs on tradable exports by about 40% is a step in the right direction and has the potential to significantly boost South African manufacturing.

As things currently stand, the changes under implementation by TNPA are as follows:

- Container full export cargo dues to be reduced by 43.2%
- Container full import cargo dues to be reduced by 14.3
- Motor vehicles exported on own wheels (Ro-Ro) cargo dues to be reduced by 21.1%
- The remainder of the tariffs in the tariff book will be retained at the same level as for the 2012/13 tariff year.

In total, Transnet has disbursed close to R 870 million in export rebates to date, with a further R120 million still awaiting disbursement. It is imperative that everything possible is done to maintain the momentum towards a tariff structure which is strongly supportive of value addition in the economy.

Transport and logistics constraints

High logistics costs and economic infrastructure blockages limit the country's economic development, thus impeding industrial development and competitiveness. The performance of the logistics system has a major impact on the economy especially in the primary and secondary sectors, as they are considerably enabled by transport infrastructure. (The manufacturing sector is a secondary sector in the sense that it involves the movement of manufactured goods). Therefore, high logistics costs affect manufacturing cost structures and revenues, as well as value-addition in manufactured goods and services. Producers are also negatively affected with respect to delivery times, product quality and customer responsiveness capabilities.

- The costs of logistics as a percentage of total GDP have risen by 0.7% to 12.6% in 2011, and are estimated to have risen to 12.8% in 2012.
- Transport costs shot up by 24% between 2010 and 2011, while a further increase of 10.3% is estimated to have taken place between 2011 and 2012. Its contribution to overall logistics costs in 2012 is pinned at 61%, which is the highest it has been in the past nine years - and also significantly higher than the global average.

The roads/rail mix: imbalances, inefficiencies and costs

- Perhaps most importantly, however, the current 70/30 road and rail split has to be reversed towards the historical 30/70 split in order to give further impetus to the development of a better rail infrastructure, sharply reduce operational inefficiencies and create much more robust and efficient linkages into neighbouring markets
- Better logistics performance is strongly associated with trade expansion, export diversification, ability to attract foreign direct investment and economic growth. Logistics costs also affect the ability of the manufacturing sector to expand in terms of international trade.

Skills for the economy

Persistent skills deficits and mismatches - especially in critical sectors of the productive economy - continue to hamper industrial and technological development. There is thus an urgent need for further demand-led skills interventions in these sectors. These efforts must include: support for better demand-side planning; deeper involvement of SOCs and the private sector in providing resources for training; and a more strategic and sustainable approach to meeting scarce skills needs overall - including on-going review of immigration policy constraints.

Monopolistic pricing of privately owned key intermediate inputs into the manufacturing sector.

The price of key intermediate inputs - particularly steel products and products in the plastics value-chain - remains a binding constraint on the competitiveness of SA manufacturing. Given South Africa's enormous resource endowment and associated capabilities, what should be a competitive advantage becomes, in some instances, a disadvantage.

Recent downward adjustments and removals of import tariffs on some of these products - particularly in sectors where single market-dominant firms exist - have provided a modest degree of price moderation, estimated at between 5% and 10%. However, import parity pricing mark-ups are often of a higher order of magnitude, meaning that such tariff reductions have a limited impact on price moderation. The cost of critical intermediate inputs such as steel, plastics and polymers into the manufacturing sectors continues to constitute a major constraint to industrialisation.

It is therefore important to reiterate the point we made last year: namely, that the prevailing practices of import parity pricing and excessive profit-taking require urgent remedial attention. If this is not achieved, we will continue to effectively throw away the potential competitive advantage of South Africa's enormous resource endowment.

Financial market failure

South Africa has yet to start making a decisive break from its entrenched consumption-driven growth model. A market-driven approach results in only very modest investment in the productive economy, characterised by relatively high finance costs and onerous term conditions. This continues to starve the manufacturing sector of private sector investment, perpetuating the high cost of finance for industrial development.

On-going efforts to deal with this issue include a scoping and review exercise currently under way which will make proposals for a more strategically focussed set of investment instruments and incentives across all DFIs and departments.

Potential unintended consequences of environmental compliance

Protection of the environment and the limitation and exclusion of the negative health and social impacts of industrial development on the population are paramount. It is important to also recognise that energy efficiency and less carbon-intensive production will increasingly become a competitive advantage in the long run. In the short to medium term however it is important to guard against the potential unintended consequences of policy fragmentation in the environmental arena. Without compromising efforts to ensure that South Africa meets its global commitments to carbon mitigation strategies, great care must be taken not to produce and implement 'blanket' environmental legislation without properly designed phasing-in mechanisms for vulnerable industrial sectors. In the absence of such mechanisms, onerous compliance requirements can easily lead to further factory closures; job losses and higher levels of poverty

In addition, the proposed Carbon Tax (intended to positively strengthen climate change mitigation measures) could turn out to be a 'tipping point' for industry if it is implemented without due regard to energy intensive and especially small and medium sized users.

In this context, it is important to begin developing a systematic set of approaches that can provide a reasonable degree of transitional protection for vulnerable industries, while at the same time continuing to energetically scale up energy efficiency interventions such as the National Cleaner Production Centre.

Intra-governmental / inter-departmental coordination

On the environmental front there is a clear need for much better intra-governmental coordination and policy coherence with regard to identifying the likely impacts of carbon mitigation legislation on employment, investment and growth.

More generally, the necessary accelerated implementation of the state infrastructure and other important developmental programmes continues to be checked by a range of problems related to insufficient structural and operational integration (in addition to regulatory blockages and compliance obstacles). Amongst other things, addressing these issues will require a considerable strengthening of the mechanisms through which the productive sector clusters work.

State-led infrastructure programme

The expeditious roll-out of the public infrastructure investment programme being driven by the Presidential Infrastructure Co-ordinating Commission (PICC) continues to be critical, and will need to be supported by robust localisation measures to ensure that the infrastructure build does not 'suck in' unnecessarily high volumes of imports to SOC programmes, thus impacting negatively on the already overstrained current account balance. At the same time it will be important to ensure that SOCs' financing of infrastructure does not lead to further damaging user-pay increases for manufacturers.

OPPORTUNITIES FOR INDUSTRIALISATION

As already extensively argued above, the global economy is witnessing massive structural changes and significant shifts in the balance of power. In addition, we are entering a new wave or 'second machine age' driven by exponential advances in technology - additive manufacturing; composite materials, deepening digitization of information flows and productive processes – together with the intensifying need to secure effective energy efficiency and carbon mitigation measures. It is of critical important that South African manufacturers remain competitive in the context of these dynamics. In the never-ending search for greater competitiveness, higher productivity, lower prices and economies of scale, SA cannot afford to find itself left behind. Consolidation and further step-changes are therefore required, demanding - amongst other things - the following:

Industrial policy

Industrial policy must develop 'deep-dive'/granular knowledge across all the main manufacturing sectors in order to identify and support dynamic export-oriented companies (especially in sectors where SA enjoys competitive advantages/opportunities). This must be accompanied by a stronger focus on performance conditionalities and more effectively targeted industrial financing in government and private sector partnerships - particularly for key sectors such as Mining and Transport Capital Equipment.

Industrial policy must at the same time protect and strengthen domestic demand by securing both public and private sector local procurement and supplier development practice and programmes.

Beneficiation

Strengthening and deepening industrial development will need to rest in great measure on securing concessional access to mineral feed-stocks as a source of competitive advantage and developing value-adding beneficiation as a competitive advantage for the domestic manufacturing sector.

IPAP 2014/15 contains the first of a set of Key Action Plans, commencing what must over the next few years become a comprehensive set of interlocking policies, programmes and action plans to secure this competitive advantage.

Infrastructure development

A key challenge for 2014 and beyond will be to use the massively scaled up infrastructure investment programmes being driven under the Presidential Infrastructure Coordinating Committee (PICC) as a powerful driver of industrialisation. This will provide both a challenge and an enormous opportunity for the localisation of a wide range of manufactured inputs into the infrastructure build – especially in construction, metals, capital and rail transport equipment and renewable energy - provided that the required institutional architecture and localisation programmes can be fully secured. Figure23 below provides a sense of the scale of investment in the pipeline over the upcoming decade.

Figure 23: Mega projects under consideration 2013 -2023

	Project stage									
R billion	Con-cept	Pre-feasi-bility	Feasi-bility	Finan-cing	Detailed design	Tender	Con-struc-tion	Ongoing pro-grammes[1]	Total	Per-cent of total
Water	–	–	20	47	22	7	15	20	131	3.6
Transport	383	–	130	19	52	88	25	126	823	22.9
Electricity	300	53	550	–	98	464	385	152	2 002	55.7
Liquid fuels	–	3	209	8	–	–	23	–	243	6.8
Education	12	–	–	68	–	–	18	34	133	3.6
Health	–	–	50	29	–	–	–	37	116	3.2
Telecommunication	12	–	–	0	4	16	3	–	36	1.0
Human settlement	–	–	–	84	–	–	26	–	110	3.2
Total	707	56	958	256	176	575	496	368	3 592	
% total expenditure	*19.7%*	*1.6%*	*26.7%*	*7.1%*	*4.9%*	*16.0%*	*13.8%*	*10.2%*	*100.0%*	

1. Ongoing programmes include multiple projects at different stages of development, such as universal access to electricity and school building programme

Source: National Treasury Budget Review 2013

Competition Issues

Strengthened, fast-tracked work is needed on competition and regulation policies and legislation, with a view to lowering the costs of inputs of critical goods and services into manufacturing and other productive activities and goods and services that are consumed by poor and working class families. This will require a thorough review of competition policy in general and the Competition Act in particular, with a view to enhancing the powers of the Commission to ensure competitive outcomes, initiate complaints protecting the broader public interest and monitor and enforce compliance.

Natural and shale gas

The discovery and exploitation of extensive natural gas fields in Eastern and Southern Africa and of very large Indicative deposits of shale gas in South Africa brings with it the potential for a major shift in the regional energy mix and provide enormous impetus to future industrial and economic growth for the region as a whole and as an anchor for regional industrial integration.

In the short to medium term South Africa's shale gas deposits must be subject to an exploration and exploitation process geared towards both environmental sustainability and affecting a structural shift in the economy. Properly handled the enormous gas and shale gas endowment in Southern Africa has the potential to very substantially lower the cost of energy across the entire manufacturing sector, while at the same time driving significant up and side stream manufacturing and services sector growth; open up the possibilities for new sectors such as ceramics and enhance downstream beneficiation with very significant multipliers for the economy.

Regional industrial integration and new export markets

Sustained and concerted regional growth is arguably the biggest stimulus to long-term growth in South Africa. Dynamic SA manufacturing companies have already seized the opportunity to increase exports, intensify marketing initiatives and establish after-sales servicing capacity. The prospects of regional integration offers the region as a whole an enormous opportunity for shared and integrated industrial development, inclusive of opportunities for SA to grow its exports base. A number of ongoing and scaled-up interventions are in the pipeline. These include: planning cross-border infrastructure; effective articulation of up- and downstream linkages in resource exploitation; and the realisation of massive construction opportunities.

Continuing rapid progress in the regional integration drive will, however, require stronger identification of complementarities and cross-border value chains; the strengthening of existing export market research; market and product identification; and an export promotion drive built around strategic domestic manufacturers.

Significant moves have, however, begun to be made under the auspices of TISA. The African Regional Strategy – now incorporated into the Diversification Strategy – is directly aimed at intensification of export promotion strategies into the continent.

BRICS

South Africa's participation in the BRICS provides important opportunities to build its domestic manufacturing base, enhance value-added exports, promote technology sharing, support small business development and equitably balance and expand trade and investment opportunities. The BRICS countries are at various stages of industrialisation and their markets are highly differentiated. At the same time as ensuring that the space for policy adjustment remains open in the ongoing process of intra-BRICS engagement the development of complementarities and integrated value chains should be underpinned by an overall approach that puts industrialisation at the core of the engagement.

IPAP 2013-2014: ACHIEVEMENT HIGHLIGHTS

A. TRANSVERSAL HIGHLIGHTS

1. INFRASTRUCTURE AND INDUSTRIAL FINANCING

- Over the past five years of this administration R1 trillion has been spent on infrastructure investment, with steadily increasing localisation.
- The IDC stepped up funding to boost youth entrepreneurship to a total of R2.7 billion. Over the past four years the IDC has invested R45 billion in equity or loans, helping to create new job opportunities in manufacturing, infrastructure development, the green economy and the services sector.
- Over the past 9 months (between April 2013 and December 2013) IDC funding approvals of approximately R9 billion resulted in effective support for 9, 111 jobs (either created or saved).

  The approvals include funding to the value of:

  - R5.5 billion for the green industry;
  - R828 million in Chemicals and Allied Products;
  - R686 million in mining and minerals beneficiation;
  - R552 million in Metal, Transport and Machinery Products;
  - R396 million in Textiles and Clothing;
  - R334 million in Forestry and Wood Products;
  - R239 million in ICT;
  - R130 million in Agro-industries;
  - R6.6 million in Media and Motion Pictures;
  - R393 million in Healthcare.

1.1. Manufacturing Competitiveness Enhancement Programme (MCEP)

- Since its inception in May 2012, The Manufacturing Competitiveness Enhancement Programme (MCEP) has approved funding for 413 entities and R2.8 billion has been committed to support manufactures with a total investment value of R12.4bn, helping to sustain 110 977 jobs; 63,094 of which will be in agro-processing, metals, chemicals, plastic, wood, pharmaceuticals, printing, the electro-technical sector and film.
- Agro-processing received grants totalling R1 billion; chemicals R440 million; metals R883 million; wood R50 million; print R134 million.

1.2. 12i Tax incentive

- Since 2010, the 12i tax incentive has offered R20 billion in tax breaks for compliant manufacturing projects, enabling the dti to leverage R32-billion in actual and projected new investments over the period 2010-2015.
- A number of the tax allowances awarded so far have been of very significant size, with PhytoAmandla, Rainbow Nation Fuels and Sephaku receiving over R896 million and Sappi and Arengo 316 approximately R543 million.

1.3. Manufacturing Investment Programme (MIP)

Since inception in 2008, the Manufacturing Investment Programme (MIP) has approved 1,856 projects, with a total incentive value of R4.9 billion. These are projected to secure investments amounting to R35.4 billion and create 43,570 jobs. The top 3 sectors for project approval were Agro-processing (498 projects, 27%); Metals (462 projects, 25%); and Chemicals (418 projects, 22.5%).

1.4. National Exporter Development Program (NEDP)

On 3 April 2013 **the dti** launched a new development programme, The National Exporter Development Programme (NEDP), aimed at bolstering South African exporters' readiness to compete globally through the identification of key products and markets, as well as skills enhancement, knowledge sharing and support. The programme seeks to boost the country's slower-than-anticipated exports and under-developed exporter base.

The Export Credit Insurance Corporation (ECIC) is an important vehicle in boosting export trade between South Africa and the rest of the continent and has been voted the best Export Credit Agency (ECA) in Africa by the readers of Global Trade Review magazine.

ECIC's increased role on the continent has resulted in a steady growth of new commitments and has seen its overall portfolio value rising from R11 billion to R17 billion. The supported projects will generate at least 15,000 job opportunities in South Africa and in the host countries where the projects are located.

2. SPECIAL ECONOMIC ZONES & INDUSTRIAL DEVELOPMENT

2.1. SEZ

In August 2013 legislation was endorsed by the National Assembly and National Council of Provinces Trade and Industry Portfolio Committees that will enable the graduation of Industrial Development Zones into Special Economic Zones. The Bill is presently before Parliament. A new tax incentive which offers a blanket corporate tax rate of 15% was approved as an investment incentive in SEZs.

2.2. IDZ

The Saldanha Bay IDZ was launched by President Zuma in October 2013. It is committed to contributing 86% to the region's gross geographic product and creating nearly 12,000 direct, indirect and induced jobs. It is expected to attract R9.3-billion in foreign direct investment over the next 25 years.

The Saldanha IDZ - which is one of South Africa's 18 Strategic Integrated Projects - is strategically located to serve the large oil and gas sector on the West Coast of Africa and provide an opportunity for greatly expanded and enhanced manufacturing of componentry for the oil and gas industry.

The Saldanha Bay IDZ licensing company has signed six lease agreements with international and South African oil and gas companies.

The Richards Bay Industrial Development Zone (RBIDZ) was allocated funding to the value of R151.9 million over the three-year period 2013/14-2015/16.

3. NATIONAL INDUSTRIAL PARTICIPATION PROGRAMME (NIPP)

- The Revised NIPP guidelines, approved by Minister Davies in 2013, have effectively closed existing loopholes with respect to multiplier calculations and have placed a strong emphasis on Direct NIPP – investment by overseas companies which secure government tenders above US$10 million – directly into the value adding and tradable manufacturing sectors in which the procurement took place.

4. PUBLIC PROCUREMENT

As will be seen in more detail later in this document (in the section on 'Transversal Interventions'), the key issue here is achieving closer alignment and strengthening of all public sector procurement and supplier development instruments.

- Government is currently using (i) designation/local content, (ii) National Industrial Participation (NIPP) and (iii) the Competitive Supplier Development Programme (CSDP) as distinct procurement levers to leverage expenditure aimed at developing new industrial and technological capabilities.
- In November 2013, PSA unveiled South Africa's above-the-line buy-local campaign, *BuyBack SA*, a collaborative effort between **the dti**, business and *Proudly South African*, including co-financing.
- On 5 July 2013, the Minister officially launched the new SABS Local Content Verification Office, together with a new technical instrument (SATS 1286) in support of South Africa's localisation strategy for state and SOE procurement. The tool creates clear objective criteria for the issuance of an audited 'Local Content Certificate'.

5. DEVELOPMENTAL TRADE POLICY

5.1. Customs

- In August 2013 SARS implemented the new automated customs management system which centralises the clearing of all import and export declarations using a single distributed processing engine. It is reported that the system is proving highly successful, with close to 39,000 import declarations and more than 55,000 export declarations having been processed since its introduction. It is also expected that it will contribute substantially to reducing delays at border posts.
- These export and import declarations represented more than 500,000 consignments that were declared and processed within the new system. Since its implementation, goods to a total trade value of R40-billion have moved through South Africa's borders, with more than R2.5-billion collected in duties.
- Over three years, R1 billion worth of illegal or substandard goods have been confiscated. This progress has been registered against the background of the SARS Modernisation Programme, which includes a real-time electronic system and introduces an electronic reference pricing system and risk engine for search and seizure. This has been supported by technical upgrading, co-ordination of intelligence and strengthening of capacity at ports of entry.

5.2. Legal Metrology Bill

The Legal Metrology Bill has now been passed by Parliament. It is aimed at promoting fair trade, industrialisation and enhanced protection for both the environmental and public health and safety. Its main measures are to expand and strengthen the scope of trade metrology and enforce legal metrology, protecting consumers against inaccurate measures and support local industrial competitiveness.

6. COMPETITION POLICY

- In 2013 the Competition Commission fined 15 major construction firms a collective R1.46-billion for collusive tendering related to projects concluded between 2006 and 2011.
- The Competition Tribunal confirmed the settlement agreement reached between telecommunications group Telkom and the Competition Commission. Telkom admitted to anticompetitive behaviour and agreed to pay a fine of R200-million over three years.
- *Poultry*: The Commission settled its price fixing and abuse of dominance case against Astral and an administrative penalty of R16.7 million was imposed.
- *Glass*: The Commission settled its price fixing and market allocation case against Glass South Africa and an administrative penalty of R4.3 million Glass SA undertook to refrain from engaging in anti-competitive conduct.
- *Cattle feed*: The cattle feed price fixing case against MGK was settled and an administrative penalty of R32 346.00 was imposed.
- *Grain*: The exclusionary conduct or margin squeeze case against SENWES was settled by the Commission and SENWES. SENWES undertook to transfer its remaining grain marketing business comprising SENWES client base and goodwill in relation to white maize sunflower and diverse commodities to a separate legal entity owned by SENWES (referred to as NEWCO) by 31 May 2014.
- The World Economic Forum's Global Competitiveness Report for 2013-14 ranked South Africa eighth out of 148 countries for the effectiveness of its anti-monopoly policy.
- The Competition Commission has gazetted the terms of reference for the market inquiry into private healthcare. The inquiry will probe the private healthcare sector as a whole to determine the factors that restrict, prevent, or distort competition, increases in private healthcare prices and expenditure in South Africa.

B. SECTORAL HIGHLIGHTS

1. AUTOMOTIVE

- Between April 2013 and December 2013, 22 Automotive Investment Scheme (AIS) projects were approved, with total estimated investments of R6.2 billion and an expected 711 new jobs to be created.
- In collaboration with the Department Environmental Affairs (DEA), **the dti** launched the Electric Vehicle (EV) Industry Road Map initiative, which looks to develop a local EV industry in South Africa through the application of several strategic new technology interventions.
- In terms of investments, industry has committed to invest R4.5 billion in manufacturing plants and automotive supplier plants. Major companies have included:
  - Iveco announced the formation of Iveco South Africa Works, a new 60:40 joint venture partnership between Iveco and local public transport operator and bus manufacturer Larimar group. The plant in Rosslyn will assemble an initial 5,000 units in 2014, with the creation of more than 1,000 new jobs.
  - Toyota invested in a manufacturing facility to produce a new model Toyota Corolla at the company's Durban plant.
- Mercedes-Benz SA has escalated its total investment in SA to over R5 billion, underpinning an increase in its local output to 100,000 units a year and creating 800 new jobs.
- Production of the new C-Class has already started at Mercedes' East London plant, and will slowly ramp up from the current 250 units a day to full capacity of 420 units a day by year's end. The new model will be introduced to the South African market in June 2014.
- Since the Designation of buses, 300 buses have been procured with localisation requirements as set out in the Designation. Major contracts have included:
  - Mercedes-Benz SA's successful tender to provide 134 buses for phase 1B of Johannesburg's *Rea Vaya* BRT system;
  - Volvo SA's successful tender to provide 40 new vehicles to the City of Cape Town for its extended MyCiti bus routes, at a cost of R180m;
  - MAN supplying 80 new commuter buses to Great North Transport, Limpopo's largest public transit operator.
- General Motors South Africa (GMSA), in partnership with component manufacturer Tenneco South Africa (SA), had been awarded a R6-billion contract to export catalytic converters to North America.

2. METAL FABRICATION, CAPITAL AND RAIL TRANSPORT EQUIPMENT

- On 17 March 2014, transport utility Transnet awarded a R50 billion contract to four manufacturers for the building of 1,064 locomotives, which will create and/or preserve approximately 30,000 jobs.
  - The contracts – which include stringent local content, skills development and training commitments - were awarded to CSR Zhuzhou Electric Locomotive and Bombardier Transportation SA to supply 599 electric locomotives, while General Electric South Africa Technologies and CNR Rolling Stock South Africa (Pty) Ltd would build and supply 465 diesel locomotives.
  - All the locomotives except 70 are to be built at Transnet Engineering's plants in Koedoespoort (Pretoria) and Durban, to help drive the country's regional integration objectives.
- The National Tooling Initiative Programme (NTIP), supported by the Gauteng Tooling Initiative (GTI), in conjunction with the Toolmaking Association of South Africa (Tasa) and the Gauteng Department of Economic Development (GDED), has launched an enterprise development programme to bring Gauteng tooling manufacturers in line with global best practice and boost their competitiveness and profitability in July 2013.
- The Gauteng Foundry Training Centre was successfully launched on 18 September 2013 at the Ekurhuleni East FET. This will assist the industry in the implementation of foundry apprenticeship programme.
- The tool maker apprenticeship course was accredited by SAQA in Nov 2013.

3. AEROSPACE AND DEFENCE

- European plane maker Airbus Military, part of the Airbus group, announced in 2013 that it had awarded South African aerospace company Aerosud major component contracts for the A400M airlifter for the whole of the programme.
- A ten-year multibillion-rand Armscor contract, which would see State-owned Denel produce over 200 armoured vehicles for the South African National Defence Force (SANDF) was expected to "significantly and permanently" change the South African defence industry. The production of the Badger is expected to create about 2,000 jobs during its production period.
- South African company Saab Grintek Defence (SGD), part of the Swedish Saab aerospace and defence group, has been awarded two orders, worth $33-million (about R335-million) in total, by Indian State-owned aircraft company Hindustan Aeronautics Limited (HAL) to supply it with electronic warfare (EW) self-protection systems. These will be fitted to the HAL Dhruv advanced light helicopters being delivered to the Indian Air Force and Army.
- The first cube satellite developed on the African continent - ZACUBE-003 - was launched into space on 21 November 2013 in Russia and is fully operational. This was made possible by a combined intervention between **the dti**, SACSA and the DST to support the development of the FSATI/CPUT Engineering in Training Programme and authorise the issuing of a launch licence.

4. GREEN INDUSTRIES

- After 28 bids in the first round, significant progress has been made in REIPPPP, with the Department of Energy approving 19 bids in the second round. The solar photovoltaic sector accounts for 9 bids; wind for 7 bids; small hydro for 2; and concentrated solar power (CSP) for 1.

  The total preferred bidders' investment is estimated at R28.1 billion with a local content value of R11.8 billion and 7,385 jobs expected to be created. The IDC's total REIPPPP-related commitments currently stand at R7.7-billion.
- The IDC approved funding for 43 projects worth R3.8 billion in Green Industries. More investments are set to follow in wind tower production, solar PV structures and PV panel assembly.
- JA Solar and Powerway established a Solar Module Manufacturing Facility in South Africa, located in Port Elizabeth's COEGA Industrial Development Zone, servicing customers in the broader Southern African region with solar modules assembled from JA Solar's high-efficiency cells.

  Production is scheduled to begin in the second quarter of 2014, with the plant targeted to reach an initial annualised capacity of 150 MW. The facility is expected to provide 200 jobs.
- In February 2014, engineering group DCD Wind Towers completed construction of a R300-million wind tower manufacturing facility, also located in the Coega IDZ. The factory will have the capacity to produce 110 wind towers a year, increasing in due course to 200 a year. The facility will be manufacturing for various original-equipment manufacturers (OEMs) already participating in the REIPPPP.
- Multi-sector company Corporación Gestamp's wind industrial division, GRI Renewable Industries, will start manufacturing wind towers at its new manufacturing facility in Cape Town during the second half of 2014. The €22-million facility will have the capacity to create 150 towers a year and is expected to create more than 200 jobs. The Gestamp group, through its subsidiary Gestamp Wind, will also be constructing a €160-million, 75 MW wind farm on the Noblesfontein farm in the Karoo, as part of an award made under the first window of the REIPPPP; and is currently bidding for another 100.8 MW wind project in the third round of the public tender process.

5. CLOTHING, TEXTILES, LEATHER AND FOOTWEAR

- Overall, the introduction of the Clothing and Textile Competitiveness Programme (CTCP) has stabilised the sector. Under the Competitiveness Improvement Programme (CIP) 44 applications were received to the value of R 645 million, with R77.7 million already disbursed. Under the Production Incentive Programme (PIP) 777 approvals have been made to date, to a total value of R2.2 billion. Since inception 63,311 jobs have been saved and 8,459 new jobs created.

  [By way of example, one success story: the K-WAY factory ownership has recently stated that its record of success growth over the past few years was directly due to **dti** assistance that allowed it to buy the best machinery available, turning round from the brink of collapse to becoming a highly profitable and stable entity producing garments of outstanding quality. Over the period of **dti** assistance it has doubled both the scale of its operations and the number of people it employs].

- The Competitiveness Improvement cluster programme has secured the participation of some notable local retailer chains. Retailers are sourcing almost a third of their clothing from local suppliers in order to respond more rapidly to breaking fashion trends.

- The share of locally produced clothing sold in the South African market has remained at around the 25% to 30% mark, despite fierce international competition and the continuing threat of 'grey' and illegal imports, while aggregate consumer demand has steadily grown over the past 10 years. Vertical clusters set up between large clothing and textile manufacturers such as Celrose and Clotex and small, micro and medium enterprises and other smaller CMT operations have made all this possible.

- Two new regional footwear clusters have been established under the National Leather and Footwear Cluster Initiative – the Fast-Track Cluster (Eddels) in KwaZulu Natal and the Southern Cape Regional Footwear Cluster (Watsons). Fast-Track's production has grown from zero to 1,200 pairs of shoes per day (approximately 26,000 pairs per month) and has created 150 sustainable new jobs, whilst Southern Cape Regional's production has grown from zero to 6,350 pairs per day (approximately 13,3350 pairs per month) and created 560 sustainable new jobs.

6. AGRO-PROCESSING AND BIOFUELS

- **Milling**: **The dti** in collaboration with Buhler, launched the innovative Isigayo plant in April 2013.**The dti** also facilitated the establishment and launch of a small-scale milling plant by Kuvusa (Pty) Ltd in Durban. 24 more mills are in the pipeline, with 8 feasibility studies having already been concluded. This initiative seeks to increase competition and reduce maize-meal prices to working class and poor consumers.

- **Agro-processing:** Company-level joint action plans were developed with a number of major companies in the agro-processing sector to facilitate investment and promote product and export destination diversification.

  Partly as a result of these interventions and incentive support, significant new investments were undertaken across a spectrum of sub-sectors such as animal feed, soybean processing, food-processing, beverages, and processed fruit and vegetables.

- 8 new products in the South African Fruit and Vegetables Canning Association (SAFVCA) were launched by the Minister in Cape Town.

- The *Eat Well, Eat Safe* campaign was launched and rolled-out to, stressing the advantages of buying local, high quality, safe products.

- To date seven biofuels manufacturers have been licensed by Department of Energy & an eighth potential manufacturer is in initial stages of licensing. Manufacturers are in 4 provinces; KwaZulu Natal, Eastern Cape, Free State & Gauteng. These producers will use Sugar Cane, sugar beet, Canola oil, Sorghum & Soya beans as feedstock. This is expected to boost job creation in agricultural sector in these provinces.

Aquaculture

To unlock the latent economic potential of the aquaculture sector, in 2013 **the dti** (in collaboration with DAFF) developed and launched the Aquaculture Development and Enhancement Programme (ADEP) - an incentive scheme designed to increase investments in the sector, enhance competitiveness and grow employment.

Since inception 11 projects with an investment value of R314 million were approved for ADEP to the tune of R72 million in incentives expected to create 364 jobs in Western Cape and Gauteng.

7. PLASTICS, PHARMACEUTICALS, CHEMICALS AND COSMETICS

- A pioneering South African medical device took the spotlight in the award-winning American medical drama *Grey's Anatomy*. The device is unrivalled as the world's first, and only, full-body, high-speed, digital x-ray scanner. Originally developed as a security tool in the diamond industry, the device was adapted by South African company Lodox Systems to enable a huge advance in medical trauma management.
- Part of the 2013-2014 Family Planning Tender (all SA-made contraceptives) worth an estimated R100 million has been designated. Preliminary data show that 70% of the 2013-2014 anti-TB tender (worth R 850 million) has been won by SA manufacturers (in the absence of designation).

8. BUSINESS PROCESS SERVICES (BPS)

- 8 new projects have been approved on the BPS incentive programme which will create an additional 2,421 jobs and attract R528 million in investments over 3 years. Since inception in 2011, the total amount of claims paid on the incentive has reached R249.6 million and the number of jobs sustained is estimated at 8,904.
- In recognition of this success, the National Skills Fund has approved a further R71 million for the Monyetla Training Project for financial year 2013/14. With match-funding guaranteed by the DBSA, this allowed the Project to move without interruption into Phase 4, guaranteeing that another 6000 learners will be trained in the short to medium term.

9. CREATIVE INDUSTRIES: CRAFT, MUSIC AND FILM

9.1 Film

- According to a recent study conducted by Deloitte for the National Film and Video Foundation (NFVF), South Africa's film industry has grown significantly since 2005, contributing R3.5 billion to the national economy in 2012 with further growth expected over the next five years.
- Between April 2013 and December 2013, 66 film and TV productions were supported by **the dti**, with an estimated total investment of R1.8 billion.
- On the basis of sustained support from **the dti**, South Africa has already attracted an impressive roster of locally shot blockbuster films, including: *Long Walk to Freedom.*

9.2 Craft

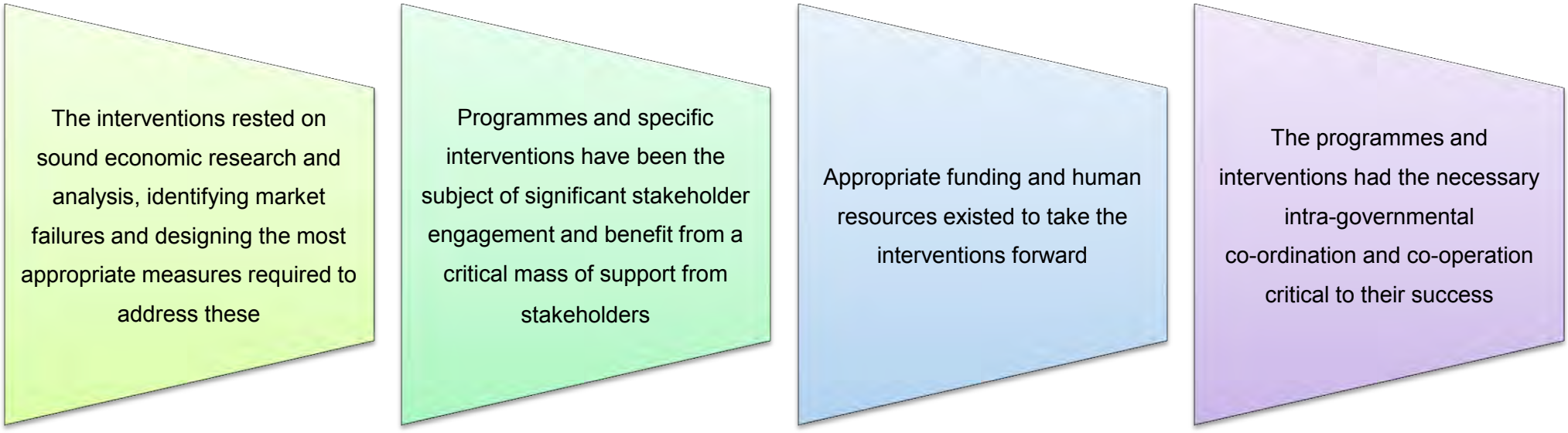
- Arising from a joint initiative between the Cape Craft & Design Institute (CCDI) and National Treasury's Jobs Fund programme, implemented by the DBSA, 104 new sustainable long-term jobs were created between September 2012 and October 2013 in the Western Cape craft and design sector – with more in the pipeline. During the first year of this three-year programme, the CCDI disbursed over R5.5 million to 44 participating enterprises, while the businesses themselves contributed over R1.3 million. The Jobs Fund covers 80% of new intervention costs, with craft enterprises making up the balance.

PROGRESS IN THE IMPLEMENTATION OF IPAP

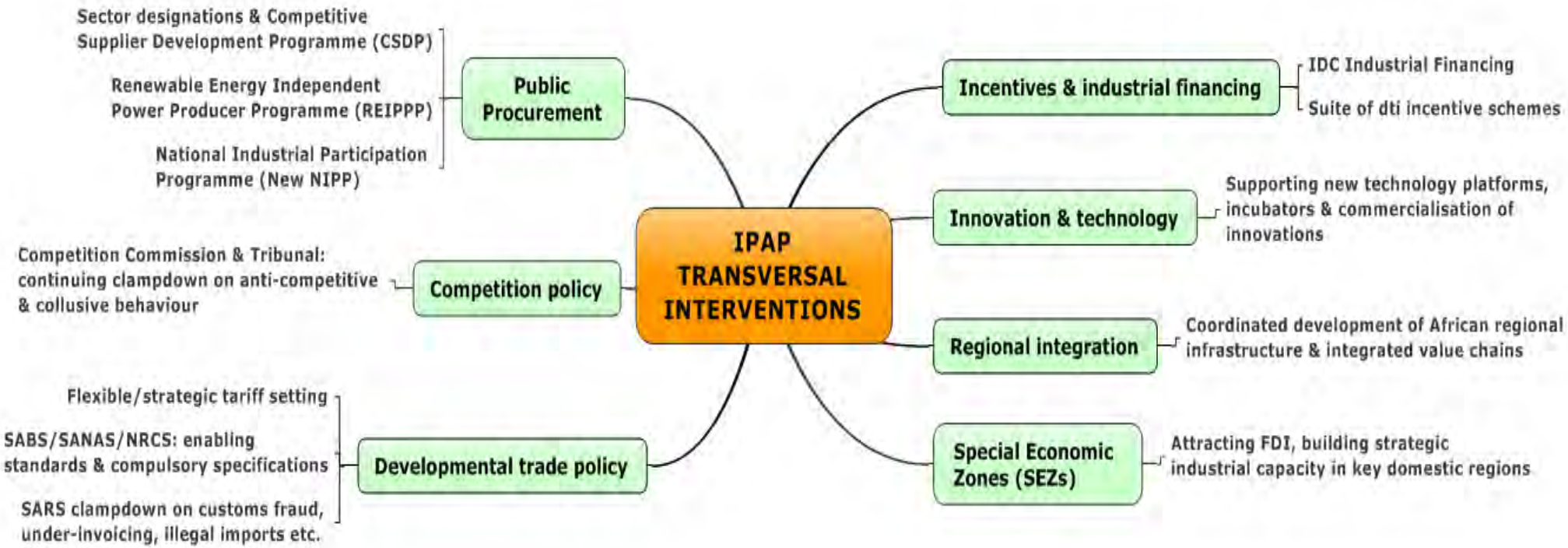
In this sixth iteration of IPAP, the key progress highlights for the previous year are once again set out graphically, for both transversal and sector-specific interventions.

These progress highlights do not represent an exhaustive list of all the outcomes and progress platforms built in the course of the previous year. They serve as a snapshot of a much more substantive body of work which underpins these achievements, based on a set of critical and indispensable principles for industrial policy and industrial development.

These are as follows:



IPAP 2014/15 – 2016/17 INTERVENTIONS: MAIN TRANSVERSAL FOCUS AREAS



TRANSVERSAL INTERVENTIONS

Public Procurement

Public procurement accounts for a sizable part of the economies of both developed and developing countries, generally contributing between 15 to 25% to GDP. In South Africa, it is one of the key industrial levers set out in the New Growth Path (NGP) and Industrial Policy Action Plan (IPAP). It is also a key policy instrument in delivering on government priorities, underpinning the achievement of the social, economic and environmental benefits that sustainable economic growth demands. In South Africa, a number of priority areas are being integrated into public procurement policy and procedures. These include: supporting and strengthening small and emerging enterprises; encouraging the commercialisation of new products and services; and fostering a sustainable green economy.

Closer alignment and strengthening of all public sector procurement and supplier development instruments is currently under way, with a particular focus on Designations, the National Industrial Participation Programme (NIPP), the Competitive Supplier Development Programme (CSDP) and the mandatory localisation provisions incorporated into large projects such as the Renewable independent Powers Producers Procurement Programme (REIPPP). These efforts need to be aligned with more strategically focussed initiatives by organisations like *Proudly South African* and all-round endeavours to change consumer attitudes and private sector procurement policy through local initiatives like the *BuyBack SA* Campaign.

In addition, ongoing efforts to secure increased private sector support for localisation - especially by large companies with significant procurement spending - must be given much greater impetus. Strategic local sourcing and supplier development in the mining; health and ICT sectors would add considerable momentum to the overall campaign.

Government has significant purchasing power that it can use to stimulate economic development and industrial innovation and transform public services. The extent to which the policy instrument of designation can be leveraged in support of the domestic manufacturing sector is indicated by the fact that in 2012 public procurement amounted to R236.65 billion and constituted 7.4% of GDP.

Table 1: List of designated industries, sectors and sub-sectors for local production

Industry/sector/sub-sector	Minimum threshold for local content
Buses (bus body)	80%
Textile, clothing, leather and footwear	100%
Power pylons	100%
Canned / processed vegetables	80%
Rolling stock	65%
Pharmaceutical products (oral solid dosage tender)	(73% of the tender volume)
Set-top boxes for TV digital migration	30%
Furniture • Office Furniture • School Furniture • Base and Mattress	 85% 100% 90%
Power and telecom cables	90%
Solar Water Heaters (collectors and storage tanks/geysers)	70%

Nevertheless, too much emphasis in procurement processes is still being placed on the traditional practice of acquiring goods and services at the lowest cost, regardless of origin and quality – thereby failing to stimulate either domestic development of improved products and services or the creation of new markets for industrial innovations.

Non-compliance across government departments and agencies remains a significant problem, indicating a clear need to build strategic sourcing and supplier development practices right across the public sector.

Harmonisation of procurement levers used by government

Government is currently using (i) designation/local content, (ii) National Industrial Participation (NIPP) and (iii) the Competitive Supplier Development Programme (CSDP) as distinct procurement levers to leverage expenditure aimed at developing new industrial and technological capabilities. The case for developing a strategy to promote specific South African industries through better leveraging of procurement goes beyond the obvious opportunity presented by the increase in government procurement spending. It is in the national interest to develop a strong and diversified local industrial base capable of expanded production of *new goods and services* in key strategic sectors.

This will require clear-cut criteria and a robust governance framework for procurement decision-making and scaling in strategic projects promoting key industrial capabilities. Such an approach should balance South Africa's short-term practical needs with the long-term goal of high value-added participation in global markets. The required guidance framework can be achieved by:

- ensuring close cooperation between **the dti**, the National Treasury (NT), the Department of Economic Development (EDD), the Department of Public Enterprises (DPE) and the major state-owned companies (SOCs) in order to complete, as soon as possible, the full-scale review of the public procurement system which is already in process under NT leadership;
- leveraging public expenditure on strategic infrastructure projects to enhance local production capabilities;
- working closely with the NT to get more departments and municipalities to participate in locally-managed transversal contracts (as has already begun to happen in the area of textiles and buses). This will assist government in negotiating for reasonable supplier prices, achieving economies of scale and providing value for money to the fiscus;
- building the necessary procurement planning, strategic sourcing and supplier development capacity across the full range of government agencies.

National Industrial Participation Programme (NIPP)

The NIPP was reviewed in 2012. This resulted in new guidelines which were approved by the Minister of Trade and Industry in 2013 as part of a process to align and consolidate the public procurement regime. The new guidelines significantly close previous loopholes - especially with respect to the calculation of multipliers – and strongly favour "direct" investment in the sector in which procurement took place.

The next challenge is to ensure that there is very strict adherence to the new NIPP Guidelines. This will require further work with the NT and other departments and agencies to ensure that existing PFMA, MFMA and associated regulations, including practice notes, are amended to make NIPP compliance unambiguous and explicit. This should be in addition to efforts to ensure that localisation and supplier development are strongly built into tender processes.

Going forward, emphasis will be placed on developing tender-specific strategies on how to exploit the direct NIPP option to leverage investment and competitiveness upgrading in the tender value chain. It is self-evident that properly aligned public procurement instruments have the potential to greatly stimulate domestic manufacturing capacity, increase industry competitiveness, create new export channels for locally produced goods and, in the process, contribute substantially to job creation.

Monitoring and evaluation of local procurement

Effective monitoring and evaluation of the designated sectors and NIPP obligations is crucial to the successful use of procurement levers. This requires that strengthened systems are put in place to ensure that the set minimum local content thresholds are met by potential suppliers. In this regard the SABS has finalised the verification frameworks and started with the verification of local production for textiles and clothing, rail rolling- stock and buses. **The dti** has also briefed the Auditor-General on the monitoring and auditing of expenditure for designated sectors. This is important in providing audit opinions on contracts relating to designated sectors, performance in general and supplier compliance.

Amplification of a focused buy-local campaign in support of the manufacturing sector

Properly organised and sustained buy-local campaigns have the potential to shift spending to benefit local businesses. It is for these reasons that the Minister of Trade and Industry – working in cooperation with *Proudly South African* - launched the first phase of the *Buy-back SA* Campaign in November 2013. Buying local means more than consumers just buying locally manufactured goods. It is also crucial that companies with large procurement budgets and supply chains support local manufacturers. Doing so is not only in the national interest but has sound commercial logic in terms of total cost of ownership, after-sales service, quick response, security of supply, niche product requirements, quality assurance and so forth.

Further work and Key Action Programmes

In keeping with key IPAP priorities, further 'waves' of designation will follow in the following sectors:

- Metal fabrication, capital equipment and transport equipment;
- Green industries and components of the renewable energy generation build programme;
- Big ticket items defined in government's strategic infrastructure projects at all levels of government.

Other priorities for the future will include:

- Designation of further sectors/sub-sectors and industries for public procurement;
- Review of existing public procurement legislation and levers;
- Deepening the transversal and central procurement of strategic projects;
- Monitoring and evaluating the performance of designated sectors;
- Alignment of the BB-BEE Codes, PPPFA and amended Regulations.

Key Action Programmes

1. Monitoring and evaluation of the performance of designated sectors

Nature of intervention and rationale

Establishment of an M&E system with the two following main components:

- A framework for monitoring year-to-date procurement in line with local content levels as set out in SATS 2011:1286 and tracking procurement expenditure against outcomes through in-year monitoring reports;
- Developing clear indicators of procurement performance aimed at providing early indication of progress (or lack thereof) in designated sectors.

Key milestone

2014/15 Q1-Q4: Implement a monitoring and evaluation tool for designated sectors.

Lead departments/agencies: dti and SABS

Supporting departments/agencies: NT, National and Provincial Departments, ITAC, SARS and AG.

2. Annual Re-prioritisation of the Procurement Plan

Key milestones

2014/15 Q1-Q4:	Review of research work done by Sector Desks for further designation of sectors/sub-sectors for local procurement.
2014/15 Q1-Q4:	Issue Procurement Instruction Notes for designated sectors.
2014/15-2015/16:	Work with other government departments and public entities to identify opportunities for further designation.
2014/15-2015/16:	Implement section 9.3 of the PPPFA Regulations, 2011. Consult with other government departments, state entities and business to identify opportunities for promoting local procurement in non-designated sectors.
2014/15 Q1-Q4:	Working in consultation with other government departments, review the PPPFA and other public procurement levers.

2014/15 Q1-Q4: Support professionalisation of supply chain/procurement/ localisation practitioners. Work with NT, PALAMA and other training institutions to empower officials to be in a position to verify local content declarations before final awards and provide a support function to bidders/potential suppliers.

Lead departments/agencies: NT, **dti,** EDD.

Supporting departments/agencies: DPE, SANAS, SABS, PALAMA.

3. Roll-out of the new NIPP Guidelines

This entails increasing the ability of NIPP to respond to Industrial development imperatives, particularly industrial diversification and job creation through direct investment. This will be achieved by NIPP obligors discharging NIPP obligations in industry sectors, sub-sectors and products that are directly related to the procurement or value chain. The creation of awareness of the revised NIPP policy and guidelines is also a key aspect of this work.

Economic rationale

The scale of import leakage associated with non-compliance is massive. it has been estimated that, apart from the SDP, NIPP only influenced tenders to the value of R72 billion out of R900 billion spent by all levels of government on capital items. This has led to considerable import leakage, loss of procurement leverage and potential loss of domestic jobs and economic activity. The aim is to maximize the value of NIPP by securing compliance within government, the local business community and the obligors.

Outcomes

The roll-out is expected to lead to the maximization of the value of NIPP through increased levels of investment, domestic manufacturing capability and capacity, industrial competitiveness, export opportunities and the creation of new jobs that can be directly linked to the NIPP.

Key Milestones

2014/15 Q1: Obtain capital expenditure projections of major procuring entities and develop tender-specific strategies on how to exploit the direct NIPP option to leverage investment and competitiveness upgrading in the value chain of the tenders

2014-15 Q2: Complete NIPP/DIP policy review and obtain Cabinet approval of the dislodgement of the NIPP requirement from Armscor procurement

2014-15 Q1-Q2: Ensure that existing PFMA, MFMA and associated regulations, including practice notes, are amended to make NIPP compliance unambiguous and explicit.

2014-15 Q1-Q3: Create awareness and secure compliance in Government and the private sector through NIPP presentations on the revised NIPP policy and Direct NIPP as a preferred method of fulfilling NIPP obligations.

2014-15 Q1-Q4: Create a culture of compliance with the NIPP requirements through presentations of the revised NIPP policy at strategic procurement forums and industry workshops so as to minimize the levels of non-compliance and import leakage through government tenders.

Lead Department: the dti

Supporting Departments/Agencies: National Treasury, key municipalities, DPE, Eskom, Transnet, DME, PetroSA, DPSA, SITA.

Industrial Financing

Many of the issues relating to industrial financing highlighted in previous iterations of the IPAP still plague the economy as a whole and the manufacturing sector in particular. The availability, cost and duration terms of finance remain key determinants of the viability of manufacturing investment. More specifically, research indicates that:

- South Africa's cost of capital is too high and the average term of loans too short relative to our major trading partners and comparable middle-income developing countries.
- Recent private credit extension has mostly been in the form of debt-driven consumption, much of which has fuelled imports.
- Where credit has been extended for investment, it has been highly concentrated in consumption-driven service sectors and, to a lesser extent, capital- and energy-intensive industries.
- New entrants without substantial equity require grace periods to go through one or more production cycles to generate the necessary liquidity to finance their capital repayments.

- Working capital is of critical importance to the operational performance of a firm: the smaller the firm size, the greater the impact of the working capital burden on the performance of the firm.
- The private sector venture capital market in South Africa is still very weak.

The private financial sector in South Africa is not adequately aggregating savings and distributing them towards productive fixed investment in the economy. Inherent market failures exist, the most critical of which is the asset-liability mismatch. The short term nature of the source of funding (mainly deposits and short-term capital inflows) manifests in impatient capital eager to fund either established relatively 'low-risk' industries (e.g. upstream capital-intensive and energy-intensive industries) or industries achieving quick and high returns (e.g. consumption-driven services).

Consequently, banks are not willing to channel funds towards relatively less well entrenched or established industries (particularly downstream manufacturing industries) as these require longer-term investment horizons and grace periods for new entrants. Moreover, downstream manufacturing industries face structural limitations in their ability to raise working capital.

The magnitude of working capital is a function of a sector's buying power and the length of time required for value addition. Consequently, working capital is a permanent and significant burden on downstream manufacturing firms – both because of the length of time required to transform input(s) to final product and the asymmetry in power in favour of upstream input markets, which dictate the terms of their transactions with downstream firms as a result of their financial depth, comparatively large scale and concentration.

Thus, firms engaged in manufacturing activities generally require financing instruments that have the following characteristics:

- longer financing terms;
- grace period allowance;
- lower interest rates; and
- effective mechanisms to fund working capital.

Various government departments and agencies have designed and implemented a range of incentive schemes aimed at addressing some of the challenges. In particular, over the past seven years, **the dti** had designed and administered a host of incentive programmes aimed at supporting and enhancing the competiveness of various types of manufacturing firm across a range of sectors.

Perhaps the best-known example - the Manufacturing Competitiveness Enhancement Programme (MCEP) launched in 2012 - assists manufacturing firms to improve their competitiveness by providing support for the upgrading of production facilities, processes, products and people; support for capital investment, working capital and pre-shipment finance; feasibility studies, product development and process improvement; value chain localisation and supplier development; cluster studies, new market access and energy efficiency upgrading.

The suite of **dti** incentives has constantly been re-developed over the years to address the changing needs of the local manufacturing sector and capture the changing dynamics of the domestic and global economic landscape – prompting many re-thinks as to how these incentives can best be calibrated and administered to keep them relevant and 'on-point'.

Some of the key considerations and requirements that have emerged from this process are the following:

- Understanding the characteristics of those firms that have used government support effectively;
- Understanding the characteristics of those firms that continue to be successful and internationally competitive *without* government support.
- Tightening the alignment between **dti** sector strategies and the manner in which incentives are administered – (i.e. are we providing support to firms that are critical to our sectors meeting their strategic objectives?).
- Achieving a better balance between the incentives offered and the economic conditionalities imposed.
- Streamlining the manner in which foreign trade missions are financed and managed, to attain maximum value for money.

- Developing an ever-closer working relationship with the Industrial Development Corporation (IDC). Despite significant progress by the IDC in re-orienting and prioritising its activities in support of NGP and IPAP sectors (within the constraints of a commercially-based balance sheet), further alignment between **the dti** and the IDC is critical to the development of incentive packages that are comprehensive, focused and provide better value for money.
- Achieving greater alignment between the activities of three key financing institutions: the Export Credit Insurance Corporation (ECIC), the Development Bank of South Africa (DBSA) and the IDC.

This process will involve constant interactions with manufacturers, the IDC and other global, regional and domestic development finance institutions. Not mentioned in the list above is the need to develop a better overall monitoring and evaluation system. **The dti** is working closely with the United Nations Development Organisation (UNIDO) to develop a monitoring, evaluation and impact assessment methodology for the MCEP, benchmarked against best practice in other comparable countries. It is hoped that this methodology will provide a useful basis from which other **dti** incentives can also be assessed.

Key Action Programme

1. Re-calibration of existing dti incentives

Nature of the Intervention

The general scarcity of both global and domestic capital necessitates that South Africa adopt a more targeted approach when deploying certain financial incentives, with the focus on attaining maximum benefit for every Rand spent.

This exercise will, as outlined above, require: continuous dialogue with manufacturing industry stakeholders; better understanding of the characteristics of firms that leverage government support effectively or continue to be internationally competitive without government support; and, finally, maximising potential synergies between the actions of the various developmental finance institutions.

Economic Rationale

South African companies are faced with a wide range of critical problems arising from the intense international competition for capital, rising input costs (especially electricity) and low and falling levels of investment arising from institutional and private sector market failures. It is critical that the manufacturing sector be provided with support during the continuing economic downturn and that market failures are actively addressed in order to raise competitiveness, prevent further industrial decline and maximise the opportunities which exist and will flow from an improved global economic climate.

Outcomes

Greater levels of competitiveness arising from access to industrial financing for working capital; product development; new market access, energy efficiency; clustering and other potential outcomes not specifically covered in existing incentive schemes - including enhanced support for BEE in the manufacturing sector.

Key Milestones

2014/15 Q3: Scope the design, range, quantum, conditions, take-up and impact of the full suite of government industrial financing packages and incentives across and in consultation with other departments and institutions.

2014/15 Q4: Develop and design a set of proposals for expanding the suite of existing support mechanisms, including fine-tuning the MCEP and designing a specialised incentive to support BEE in the manufacturing sector.

2014/15 Q4: Develop and design further sector-specific incentives for strategic sectors - in particular Green Industries, Agro-processing and the Metals, Capital and Rail Transport Equipment Sectors.

Developmental trade policy

The technical infrastructure institutional framework supports industrial development through maintenance and improvement of compulsory standards and regulations that require accredited testing, calibrations, inspections, certification and verification services as evidence of compliance. This capacity is an indispensable component of any modern competitive economy. Accurate and internationally recognised standards of measurement performed in industry are an important factor for competitiveness in international trade. Compliance with regulations, standards and other specifications or labelling requirements has to be demonstrated for every batch of goods.

The development of world-class testing, calibration and certification capabilities is of great value in scaling up and resuscitating manufacturing industries, while simultaneously contributing to broader social benefits.

Great strides have already been made with focused enforcement programmes targeting the main South African border posts, coupled with a visible media campaign to broadcast the seizure and destruction of non-compliant products. This has been made possible through increased cooperation between **the dti**, Customs and the South African Revenue Services (SARS) - partnerships that will be further strengthened over the coming period.

The broad strategic thrust of the technical infrastructure institutions is to support the state's comprehensive and integrated drive to scale up industrial policy, with a strong focus on priority sectors that have been identified and positioned for up-scaling: namely, the green industries, agro-processing and metal fabrication, capital and rail transport equipment, advanced manufacturing and clothing, textiles and footwear production.

The key technical infrastructure institutions involved are the South African National Accreditation System (SANAS), National Regulator for Compulsory Specifications (NRCS), South African Bureau of Standards (SABS) and the National Metrology Institute of South Africa (NMISA).

These institutions – in conjunction with others such as SARS – are also critical in curbing various forms of customs fraud and illegal imports, harmful sub-standard products, smuggling and under-invoicing – all of which undermine productive capacity and employment growth across a wide range of sectors.

Key opportunities

The key opportunities that Technical Infrastructure policies and institutions will exploit over the next three years include:

- An increasingly integrated and coordinated approach towards handling industrial and trade-related matters;
- Stronger enforcement of existing mandatory standards that lock out inferior and sub-standard products;
- The introduction of additional mandatory standards that will foster the development of new industries, particularly in the green industry area;
- Providing strengthened conformity assessment support for export products, in order to unlock export growth opportunities in key identified markets;
- Up-scaling both the human and technical capacity of the technical infrastructure institutions and conformity assessment services so as to respond more effectively to the needs of industry in general;
- Continuously implementing improved, accurate, internationally accepted measurement to effectively monitor imports for safety and conformity;
- Stronger integrated and co-ordinated programmes with SARS (premised upon intelligence-driven information from industry) to step up compliance monitoring and increase the rate of successful prosecutions.

Constraints

- Lack of understanding - and therefore underutilisation - of technical Infrastructure offerings on the part of emerging industries and other stakeholders.
- Insufficient recognition of technical infrastructure offerings as support mechanisms for improved outcomes in the other **dti** /EDD agencies - e.g. ITAC, IDC, NCC etc.
- Given that the technical infrastructure institutions serve a variety of regulators, any delay in the implementation of their regulations impacts negatively on the overall efficacy the programmes of these institutions. Collaborative forums have been established to manage this issue.
- Budgetary issues that constrain the ability of the technical infrastructure institutions to deliver fully on their mandates.

Key Action Programmes

1. Re-alignment of technical infrastructure activities with IPAP sectors

Nature of the intervention

Strengthening and aligning the activities of the technical infrastructure institutions with IPAP imperatives, through the development of accurate measurement and testing capabilities, standards, compulsory specifications and accreditation programmes that serve sector priorities.

Economic Rationale

In line with the approach adopted in the previous IPAP iteration, the technical infrastructure institutions as a collective developed a framework for the appraisal of existing national policies applicable to each IPAP sector. This resulted in synchronised Action Plans in the following sectors: green industries, agro-processing, metal fabrication, capital and rail transport equipment, advanced manufacturing, clothing, textiles and footwear and the nuclear industry. The key milestones in the identified sectors reflect targeted responses to the gaps that were identified during this process.

Outcome

Re-aligned and synchronised technical infrastructure institutions' activities, better able to support IPAP priorities.

1.1. Green industries

Key milestones

2014/15 Q2 - 2016/17 Q4:	Second phase upgrade of the electrical power and energy measurement standards by NMISA to support measurements required by ESKOM for the maintenance of the national power grid.
2014/15 Q3:	SANS 53165 on thermal insulation products for buildings; specification for factory-made rigid polyurethane foam (PUR) products.
2014/15 Q3:	Expand the capacity of the Appliances Laboratory to enable it to test for energy efficiency.
2014/15 Q4:	Revision of SANS 204 - Energy Efficiency in Buildings.
2014/15 Q4:	Provide national measurement standards for building efficiency (energy saving).
2014/15 Q4 – 2015/16 Q4:	New upgraded national measurement standards for energy efficient lighting.
2014/15 Q4 - 2016/17 Q4:	Provide national measurement standards for air pollution monitoring.
2014/15 Q4:	Air quality testing accreditation programme to be expanded to include stack testing emissions monitoring.
2015/16 Q4:	Energy Efficiency Performance of Buildings Accreditation Programme to be developed and rolled out.
2015/16 Q4:	Amendment of Compulsory Specification VC 9006 for hot water storage tanks; upgrading of energy-efficiency requirements and labelling finalised.

Lead departments/ agencies: NMISA, NRCS, SABS, SANAS.

1.2. Agro-processing

Key milestones

2014/15 Q2:	Publication of SANS 1377 on olive oil and pomace oil.
2014/15 Q4:	Revision of SANS 1675 for canned meat products.
2014/15 Q4:	New SANS for Live Rock Lobster.
2014/15 Q4:	Organic Agriculture Production food accreditation programme to be developed and rolled out.
2014/15 Q4:	Roadmap for the traceability of bio-analytical measurements in South Africa.
2014/15 Q4 - 2016/17 Q4:	Provide reference measurement capability for pesticides and inorganic elements in environmental and food matrices, including fish, in support of food safety.

2014/15 Q4 - 2016/17 Q4: Provide reference measurement capability for dioxins and furans and dioxin-like toxic substances in environmental and food matrices in support of food safety and EHS.

2015/16 Q2: New Compulsory Specification for olive oil.

2015/16 Q2: Amendment of Compulsory Specification for canned fish products.

2015/16 Q3: Amendment of Compulsory Specification for canned meat products.

2015/16 Q4: New Compulsory Specification for Live Rock Lobster published for public comment.

2016/17 Q4: New standard for live aquaculture oysters.

Lead departments/ agencies: NMISA, NRCS, SABS, SANAS.

1.3. Metal Fabrication, Capital and Rail Transport Equipment

Key milestones

2014/15 Q3: Upgrade the laser tracker dimensional facility at NMISA to ensure traceability of large dimensional measurements for locomotives and coaches.

2014/15 Q4: Establish an X-ray Diffraction Facility for advanced stress and strain measurement. This initiative will also be in support of cutting edge nano-technology.

Lead departments/ agencies: NMISA.

1.4. Automotive Products and Components

Key milestones

2014/15 Q4: Upgrade safety standards for passenger and commercial category vehicles: amendment of Compulsory Specifications VC 8023 and 8025 for M and N category vehicles to make ABS braking systems compulsory.

2014/15 Q4: Finalise Amendment of Compulsory Specifications VC 8022, 8023, 8024 and 8025, to add additional safety features to automotive vehicles and align SA requirements with latest UN (ECE) requirements.

2014/15 Q4: Finalise Amendment of Compulsory Specifications VC 8056 and 8059 for pneumatic tyres for passenger and commercial vehicles.

2014/15 Q4: Develop and roll out the Road Transport Management Accreditation Programme.

2015/16 Q1: Finalise Amendment of Compulsory Specification VC 8013 for hydraulic brake and clutch fluid.

2014/15 Q3 - 2015/16 Q4: Recapitalisation of the dimensional, force and torque laboratories in support of the automotive sector.

Lead departments/ agencies: NMISA, NRCS, SABS, SANAS.

1.5. Biofuels

Key milestones

2014/15 Q4 – 2016/17 Q4: Develop or improve measurement standards, certified reference materials and standard methods for accurate measurement needs for biofuels.

Lead departments/ agencies: NMISA

1.6. Plastics, Pharmaceuticals, Chemicals, Cosmetics

Key milestones

2014/15 Q1: Revision of SANS 597 on sterilized components sodium lactate intravenous infusion (Ringer-lactate solution for injection)**.**

2014/15 Q2: SANS 721 on polypropylene (PP) pipes and fittings for soil, waste and vent applications for above ground use.

2014/15 Q4: SANS 1631 on plastic based push-fit fittings for copper tubes.

2014/15 Q4: Revision of SANS 1526 on thermoplastics sheeting for use as a geo-membrane.

2014/15 Q4: Revision of SANS 1557 on sunscreen products.

2014/15 Q4: Revision of SANS 368 on aloe products.

2015/16 Q1: Development of standards for traditional/complementary medicines.

2015/16 Q1: SABS upgrading facilities for testing of supplements and complementary medicines.

2014/15 Q4 - 2016/17 Q4: Develop analytical capabilities for monitoring of hazardous substances in polymers, plastics and packaging materials.

2015/16 Q4- 2016/17 Q4: Provide analytical reference measurement traceability for pharmaceutical, personal care and cosmetic products; specifically to analyse for toxic elements.

Lead departments/ agencies: NMISA, SABS, SANAS

1.7. Clothing, textiles and footwear

Key milestones

2014/15 Q4: Amendment of Compulsory Specification VC 9002 for safety footwear finalised.

2014/15 Q4: Development of a standard for wild landfire-fighting personal protective equipment SANS 16073).

2015/16 Q4-
2016/17 Q4: Provide analytical reference measurement traceability for textile fibres and dyes.

2016/17 Q4: Refurbishment of textiles laboratory to continue supporting the consignment inspection services.

Lead departments/ agencies: NMISA, SABS

1.8. Advanced manufacturing

Key milestones

1.8.1. Advanced materials

2014/15 Q4 –
2016/17 Q4: Establish nano-traceability facility to address accurate measurements in nano manufacturing.

1.8.2. Electro-technical

2014/15 Q2: Testing of power tools: following the upgrading of the now fully equipped laboratory, increase the drive to ensure testing of all power tools as required by the compulsory standard.

2014/15 Q2: Electric meter testing and verification: upgrade the laboratory to enable it to test to the full requirements of the Specification.

2014/15 Q3: Expansion of NETFA-SABS Electro-technical Testing Facility [e.g. High Voltage Direct Current (HVDC)].

2014/15 Q4: Finalise new Compulsory Specification for electrical luminaires (includes LEDs).

2015/16 Q4: NETFA capitalisation (SABS and Eskom project) in order to improve capability to test to full scope of national, international and VC standards in High Voltage, increasing capacity in short circuit to test up to 33kV (currently up to 11 kV).

1.8.3. Information & Communications Technology

2014/15 Q4-
2016/17 Q4: Upgrade the national measurement standards required to perform diagnostic network tests on fibre optic and wireless telecommunication systems.

2014/15 Q4: Conduct a feasibility study on developing a full Accreditation Programme for Information Security Management Systems and Information Technology Services Management Systems.

2014/15 Q3: SANS 1466 series on Information technology: process benchmarking framework (parts 1 and 2).

2015/16 Q1: SANS 1466 series on Information technology: process benchmarking framework (parts 3 - 5).

Lead departments/ agencies: NMISA, NRCS, SABS, SANAS.

1.9. Nuclear energy

Key milestones

2014/15 Q2 - 2015/16 Q2: Procurement, installation and commissioning of an X-ray system in support of the South African Nuclear Industry: traceability for radiation dosimetry and radiation protection.

2014/15 Q4: Support the South African nuclear regulatory bodies (DOH and NNR) in fulfilling their mandate through improved traceable measurements and technical expertise.

2015/16 Q4: Develop and roll out an Accreditation Programme for nuclear pressure equipment and component inspection and facility management system certification.

2015/16 Q4: Identify technical experts and train SANAS technical assessors.

Lead departments/ agencies: NMISA, SANAS

1.10. Business Process Services

Key milestones

2014/15 Q4 - 2016/17 Q4: Upgrade the national measurement standards required to perform diagnostic network tests on fibre optic and wireless telecommunication systems.

Lead departments/ agencies: NMISA

2. Strengthen the technical infrastructure to support industrial development

Key milestones

2.1. Movement from Trade Metrology to Legal Metrology

2014/15 Q1: Promulgation of the Legal Metrology Act.

2.2. Updating of the National Building Regulations and Building Standards Act

2014/15 Q4: Finalise National Building Regulations and Building Standards Policy Paper for new legislation.

2015/16 Q4: National Building Regulations and Building Standards Bill drafted.

2016/17 Q4: Parliamentary legislative process.

2015/16 Q2: New NBR Part XB for water efficient building regulations submitted to **the dti**.

2015/16 Q2: Amendment of relevant National Building Regulations to include plumbing requirements as per the Water Act.

2015/16 Q2: New Compulsory Specification for plumbing components published for public comment.

2016/17 Q4: Finalise new Compulsory Specification for timber roof-trusses and punched metal fasteners.

Lead departments/ agencies: the dti, NRCS.

2.3. Strengthening the enforcement system of NRCS

Key milestones

2014/15 Q4: Prepare a report benchmarking SA border enforcement against international best practice and calibrating the NRCS's enforcement strategy.

2015/16 Q2: Finalise gap analysis research report to inform the NRCS risk-based strategy aimed at improving NRCS coverage of the higher-risk industries; draft appropriate regulations.

Lead departments/ agencies: NRCS

2.4. Consumer protection initiatives

Key milestones

2015/16 Q3: Development of standards for consumer warranties and Consumer Contact Centres to Support Consumer Protection Act.

2015/16 Q4: New legal metrology technical regulation for multi-dimensional measuring instruments and gas meters.

2015/16 Q4: New Compulsory Specification for safety of toys.

2015/16 Q2: Amendment of Compulsory Specification VC 8032 for personal flotation devices finalised.

Lead departments/ agencies: NRCS, SABS

3. Ongoing developmental tariff reform

Nature of intervention

South Africa's tariff framework is informed by the National Industrial Policy Framework (NIPF) and is defined by a strategic approach to tariff-setting. It is administered by the International Trade Administration Commission under the terms and conditions of SA's obligations to the World Trade Organisation.

South Africa's tariff policy-setting takes place on a sector-by-sector basis, informed by different sector strategies. Therefore, both developmental tariff reform and tariff setting are continuous on-going interventions.

Economic Rationale

The global economic crisis has led, amongst other things, to increasing use of defensive trade measures – both tariffs and non-tariff barriers - which pose significant threats to value-addition, employment and investment. The process of accelerated, often undifferentiated, trade liberalisation in South Africa after 1994 (characterised by sharp tariff reductions across the board) has contributed very significantly to the steady decline of the country's industrial capabilities. With this in mind, the selective and flexible use of tariffs is now regarded as a key instrument for increasing value-addition, employment, investment, innovation and productivity growth.

In general, flexible and strategic tariff reform means two things: on the one hand, lowering tariffs in upstream sectors characterised by monopolies (in order to reduce input costs for downstream value-adding manufacturers); on the other hand, working on a case by case basis that takes into account a range of factors in each sector, including impacts on value-addition and employment.

Outcome

Improved competitiveness through further downstream value-addition and increased manufacturing sector employment.

Key milestones

2014/15 – 2016/17 ongoing: Scope for industries to apply to ITAC for selective tariff increases on products with significant potential for the creation and retention of sustainable jobs, import replacement and "water" between bound & applied rates.

2014/15 – 2016/17 ongoing: Scope for further selected decreases in tariffs, particularly in monopolistic sectors that manufacture intermediate inputs into manufacturing and other productive sectors, in order to support downstream value-addition.

2014/15 – 2016/17 ongoing: Scope for selective creation of rebates for manufacturing products that attract duties, particularly where these are intermediate products in manufacturing, in support of the value-adding manufacturing sectors.

Lead departments/agencies: the dti, ITAC, EDD.

4. Clampdown on customs fraud, illegal imports and sub-standard products.

Nature of intervention

Ongoing interventions in customs fraud-related issues, illegal imports and sub-standard products, including the roll-out of the Customs Modernisation Programme aimed at curbing customs fraud, illegal imports and sub-standard products.

Economic Rationale

To protect the South African manufacturing sector from the threats posed to it by illicit trade: sub-standard products and illegal imports characterised by undervaluation, false declarations (origin and tariff), stage consignments, rerouting via third countries and misuse of duty rebates and credits. Illegal imports and substandard imports which do not meet minimum South African standards and specifications for goods provide unfair competition at the expense of local manufacturers producing quality products that meet South African standards.

Outcome

Stronger integrated and co-ordinated programmes in the clampdown on customs fraud, illegal imports and sub-standard products - such programmes to combine border enforcement and post-border compliance, with enforcement extended to the points of distribution and sale.

Key milestones

2014/15 – 2016/17: Strengthening of a range of measures – including closer collaboration between **the dti**, industry, NCRS, SABS and SARS – through multi-sectoral forums.

2014/15 – 2016/17: Extend application of the Indicative Reference Price System to other vulnerable sectors to provide an increasingly effective early warning system.

2014/15 – 2016/17: Ongoing development of programmes aimed at improving compliance within industry and contributing to the formulation of best practice in the facilitation of trade, in accordance with all the Acts administered by SARS.

2014/15 – 2016/17: Conduct continuous targeted investigations and raids on non-compliant products; confiscation of substandard and illegal products in the possession of individuals and companies.

Lead departments/agencies: SARS/NT/ITAC

Competition Policy

Successive iterations of IPAP have made the point that the South African economy continues to experience ongoing problems with regard to low levels of effective competition in sectors dominated by a few entrenched firms. Returns are derived less from effort and innovation than from the historical position inherited by such firms. More specifically, where anti-competitive conduct concerns important inputs to downstream, labour-absorbing activities, it directly impacts on employment. Anti-competitive behaviour also has serious adverse effects on low-income households in that it leads to unnecessarily high prices for the basic consumer goods they rely upon.

In the case of the monopolistic provision of publicly provided strategic goods and services, oversight is provided by a legislatively established Sector Regulator. However, while there is a clear need to continue to strengthen regulation of public entities, the main focus in the IPAP is on the role of competition authorities in relation to private sector behaviour, especially where critical and strategic inputs for the manufacturing sector are concerned.

It is also recognised that competitive outcomes require more than enforcement by the competition authorities. Interventions across institutions must be geared to monitoring the conduct of dominant firms. They must ensure that such firms' strategies, particularly where they receive state support, are based on dynamic, long-term investments in building capabilities and not on the short-term exploitation of market power. This must be supplemented by support for the entry and growth of new firms wherever practical.

Thus key intermediate inputs in critical value chains continue to be a matter of considerable concern. In particular:

- The concentrated supply of certain strategic inputs into manufacturing and other productive processes such as carbon and stainless steel, aluminium, chemical polymers and fertilizers;
- In addition to the concentrated supply of inputs, there is frequent concentration in the purchasing of inputs. Thus value-adding and labour-absorbing manufacturers often face both upward cost and downward price pressures;
- Expensive wage goods such as food, basic clothing, municipal services and public transport, all of which have a major impact on working-class and poor households..

The focus of the Competition Commission's activities over the IPAP period will continue to be on the three areas identified above. The Commission will increase its engagement with government and public institutions to play a more active role in following up on findings of anti-competitive conduct and in making further policy recommendations to government.

There are additional areas of complementary work that require strengthening. These include the following:

- The strengthening of practical measures and mechanisms for implementation and ensuring accountability;
- The identification of concrete complementary measures to competition enforcement, as part of a broader policy toolkit that could be deployed to address anti-competitive behaviour. This requires the establishment of a statutory mechanism by which the Competition Commission can make recommendations regarding complementary actions required to address anti-competitive conduct.

  For example, a standard mining licence includes a stipulation that minerals sold in South Africa are to be sold at competitive prices; but there is no mechanism for the monitoring and review of compliance. In this regard, an important aspect of the Mineral and Petroleum Resources Development Act (MPRDA) is to make provision for the Minister to initiate or prescribe measures to incentivise the beneficiation of minerals in South Africa, subject to particular terms and conditions that the Minister may determine. The implementation of this provision is particularly important where the exercise of market power is disincentivising mineral beneficiation.

This work, which dovetails with a set of proposals agreed by Cabinet in terms of proposals arising from the work of the Inter-Departmental Task Team on Iron and Steel, could include the following:

- A process for monitoring and enforcement of mineral licence provisions;
- A process for engagement with ITAC to ensure that it takes into account competition considerations in tariff reviews, such as guarding against further protection of dominant firms exploiting their market power; and
- An exploration of whether the powers of the National Electricity Regulator of SA (NERSA) can be extended to regulate the pricing of by-products from fuels such as ammonia and polymer chemicals.

In addition, government has committed to ensuring that administered prices do not, as a group, rise faster than inflation. EDD undertakes to monitor administered prices and on that basis work with the relevant authorities to help develop more sustainable balances around cost to users, financing options, and quality of service.

Key Action Programmes

1. Strengthening implementation of competition policy

Nature of the intervention

This programme seeks to actively conduct comprehensive investigations on targeted manufacturing and services sectors with the aim of improving compliance and reducing anti-trust behaviour in the economy.

Economic Rationale

The South African economy continues to be dominated by a few entrenched firms, which tend to abuse their dominance through anti-competitive behaviour. Many producers are squeezed between monopolistic providers of their inputs (for example, steel and chemicals) and purchasers of their outputs (e.g. retailers). Monopolistic provision of key goods and services therefore remains a major challenge that needs to be addressed for the long-term benefit of the manufacturing sector.

Outcome

Improved economic welfare for consumers and reduced barriers to entry for small and medium manufacturers.

Key milestones

2014/15 - 2016/17: Continued active focus of competition authorities on investigation, prosecution and policy advocacy with regard to:

- Intermediate industrial and energy-intensive products, such as steel, chemicals, coal, fuel and cement;
- Air transport, information technology;
- Food and agro-processing;
- Banking and insurance;
- Infrastructure and construction.

2014/15 - 2016/17:	Annual reporting on the impact of competition enforcement in these sectors, and identification of appropriate complementary measures to be taken by Government and public institutions to improve competitive outcomes.
2014/15 – 2016/17:	A number of strategically identified market enquiries initiated by the Competition Commission into priority areas identified in consultation with Government.

Lead departments/agencies: EDD and Competition Commission

Supporting departments/agencies: the dti

2. Ensuring competitive outcomes

Nature of the intervention

This intervention focuses on the economic impacts revealed by the findings of investigations into anti-competitive behaviour. This entails strictly monitoring compliance with the conditions attached to penalties imposed on firms. It could also involve leveraging various kinds of government support to encourage competitive behaviour.

Economic Rationale

The competition authorities have been actively pursuing investigations, some of which have led to penalties being imposed on a number of medium to large firms. A significant number of these firms have historically benefitted from state support, including provision of infrastructure, financial assistance and procurement, and some continue to benefit without adequate criteria or conditions attached to the support provided. The prevalence of abuse of market power by entrenched firms, therefore, requires the tightening of conditionalities associated with state support. This also requires putting in place monitoring mechanisms to ensure that such conditionalities are adhered to.

Outcome

Increased competition within the South African economy through increased support for new entrants into the market and reduced abuse of market position by dominant enterprises.

Key milestones

2014/15 – 2016/17:	Stronger conditionalities to be established on state support for large firms, including development finance and infrastructure inputs, linked to competitive conduct.
	Review of Competition Act in particular to strengthen capacity of Commission to initiate investigations and to enforce conditions.
2014/15 – 2016/17 Q1:	Develop a guidance paper to assist Government on pro-competitive means of implementing localisation in the industries that have been designated.
2014/15 – 2016/17:	Monitoring of compliance with conditions, in consultation with the Competition Commission.
2014/15 – 20116/17:	Evaluation of sectoral trade policy measures in light of the conduct of firms in particular sectors, to ensure that dynamic comparative advantages are developed (in consultation with the Competition Commission).
2014/15 – 2016/17:	Wider actions to be identified, including possible regulatory measures, against dominant firms engaging in anti-competitive conduct, particularly with regard to key inputs into labour-absorbing sectors and the pricing of wage goods.
2014/15 – 2016/17:	Increased support for entrants and smaller rivals relative to entrenched dominant firms.
2014/15 – 2016/17 Q4:	Undertake three impact assessments to measure the cost effectiveness and wider economic benefits and value to the economy of the Commission's interventions in that sector or sub-sector, in order that future policy formulation is informed by the outcomes.

Lead departments/agencies: EDD

Supporting departments/agencies: the dti, Competition Commission, IDC, ITAC, seda.

Innovation and Technology

Leveraging Science, Technology and Innovation for Industrial Growth and Development

Background

Science, Technology and Innovation (STI) are recognised as key drivers of long-term economic growth, which today is increasingly led by the production and dissemination of knowledge for the enrichment of all fields of human endeavour, and wherein the ability to distribute and effectively exploit knowledge has become a major source of competitive advantage, wealth creation and improvements in the quality of life.

Governments are increasingly making innovation a key issue on policy agendas, recognising its potential to promote economic growth and address social and environmental challenges. The importance attached to innovation is reinforced in the national and international policy domain through, for example, the Innovation Strategy[3] of the OECD (Organisation for Economic Co-operation and Development), the European Commission's concept of the 'Innovation Union'[4], and South Africa's own 10-year plan 'Innovation towards a knowledge-based economy'[5].

The importance of STI can in part be attributed to the following factors:

- Substantial increase in global science, engineering and technology (SET) efforts, leading to enhanced capabilities and knowledge intensive production;
- Increasing participation of developing countries in global SET activities;
- Ever-increasing complexity and technological capacity in components and products;
- Significant growth in higher technology and advanced manufacturing goods, indicative of changing global exports and markets, and
- The fact that technology has a time-bound value, implying that continuous knowledge reinvestment is required, irrespective of the type of industrial sector.

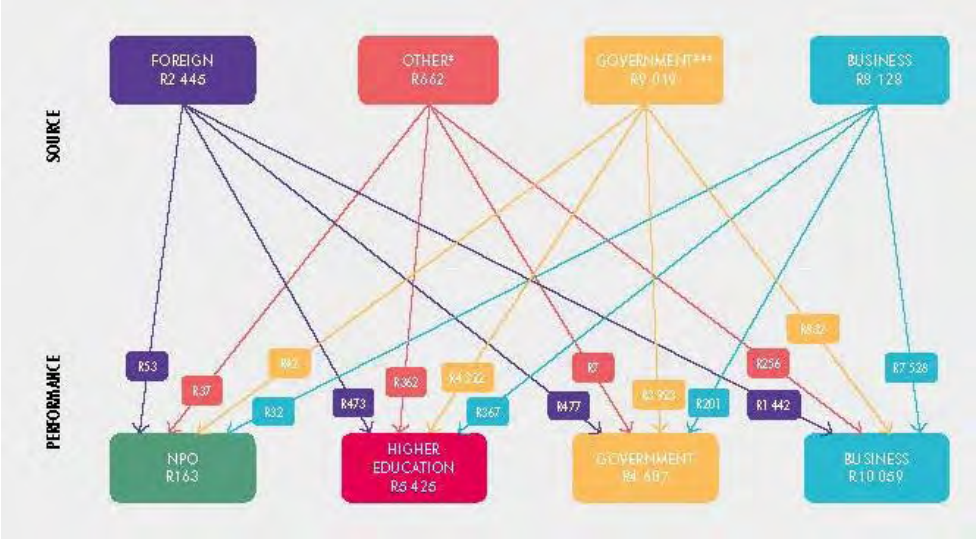
[3] See: http://www.oecd.org/site/innovationstrategy/

[4] See: http://ec.europa.eu/research/innovation-union/index_en.cfm

[5] South African Journal of Science 2012, Vol. 108, Issue 7/8

South Africa's STI policy package provides a sound basis for further improvement and up-scaling of the country's industrial development interventions as spelled out in the National Industrial Policy Framework (NIPF) and in successive iterations of the IPAP.

Figure24: Major R&D funding flows (million), 2010/11 [6]



Decades of research have shown that innovation is the most important driver of long-term prosperity and that innovative businesses create more jobs and grow faster[7]. Data from the most recent Innovation Survey[8] found that 65.4% of South African firms were involved in innovative activities, but that only 27.2% of firms were able to successfully bring their innovations to market. In addition to this, the type of innovation (assessed in terms of percentage of turnover generated from new innovations), is predominantly incremental rather than 'brand new' – with firms reporting that 85% of the turnover from fresh innovation is attributable to building on existing technological capabilities.

[6] National Survey of Research and Experimental Development [2010-11 Fiscal Year]

[7] http://www.nesta.org.uk/project/plan-i Accessed on 4 February 2014

[8] South African Innovation Survey 2008, covering the period 2005 - 2007

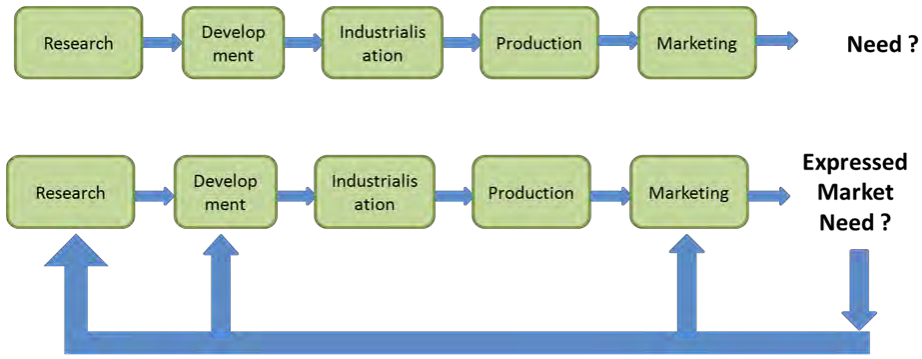
South Africa's STI policy package and development interventions have to date been elaborated in a manner that seeks to address some of these challenges: not only by incentivising R&D, but also by creating innovation support structures that aim to enable a greater translation of innovative ideas into prototypes for further commercial development.

South Africa's STI economic and industrial development context: coordination through streamlining and harmonisation

The effective improvement and up-scaling of the country's industrial development objectives – i.e. towards diversifying the economy through movement into non-traditional tradable goods and services and towards a knowledge economy - requires effective dovetailing of South Africa's STI, economic and industrial policy objectives. Efforts directed to address this requirement are demonstrated in the Key Action Plans set out in this iteration of IPAP; in particular through enhanced collaborative efforts between the DST and **the dti**.

The existing instruments and support mechanisms in South Africa's National System of Innovation also seek to maximise opportunities for innovation, derived from market, business and R&D needs, as illustrated in the simplified schematic below.

Figure 25: Schematic depicting innovation due to R&D exploitation, or as a result of market demand



The development and leveraging of STI is ideally achieved through partnerships between government, academia (including Science Councils) and industry (large, medium, small and micro enterprises).

The DST carries overall responsibility for STI policy, which can be summarised as follows:

- Enhancing knowledge generation capacity;
- Developing the country's innovation capacity;
- Developing appropriate human capital to meet the science, technology and innovation needs of society;
- Building a world-class STI infrastructure; and
- Positioning South Africa as a strategic research, development and innovation partner and destination.

The dti occupies the other end of the value chain which is associated with commercialisation and support for the 'learning and effort' required for the commercialisation of new and acquired technologies. In addition, several other departments contribute to the national STI effort in funding human capital development, focussed R&D programmes, and local development programmes.

Harmonisation and intra-governmental coordination of research and development support and incentives are essential if optimal value is to be unlocked from the national investment in STI. This should be achieved through the joint design and implementation of various development interventions by the DST and **the dti** in particular.

The following STI development interventions will be emphasised:

- *Identification and support of large research and development (R&D) programmes in knowledge-intensive areas, with the potential to renew existing or establish new industries to enable enhanced market penetration and sustainable competitiveness*.

  This will be coordinated through the development and implementation of the Emerging Industries Action Plan (EIAP). This serves as a mechanism a) to enable partnerships across government and with local industrial partners, in order to increase market access (local and foreign); and b) to improve funding certainty by leveraging commitments from development finance institutions (such as the Technology Innovation Agency and the Industrial Development Corporation).

- *Support the movement of South Africa's industrialisation process towards a knowledge economy by enhancing the participation of innovative enterprises and high-technology SMEs in particular*.

  This will be achieved by supporting both existing and new technology-based SMEs to access STI knowledge, infrastructure and innovation support programmes, in order to better enable the conversion of innovative prototypes into commercial and industrial products and services.

- *Conduct an environment scan of research, development and innovation support initiatives to develop a comprehensive understanding of the offerings already in existence, as well as identifying possible mechanisms to create better linkages between them.*

  Plans will be developed to address areas where innovation support gaps and/or needs are identified. A web-based platform will also be established to serve as an interactive vehicle to foster continuous engagement between the various actors within the technology innovation and commercialisation landscape, and to act as a channel through which government (in particular the DST and **the dti**), can communicate with stakeholders.

- *Initiatives in the development of a Technology Commercialisation Strategy will be accelerated so as to produce a policy framework that will facilitate and improve the translation of research outputs into commercially viable products and services*.

Key Action Programmes

1. Large R&D programmes in knowledge-intensive areas

Nature of the intervention

Establishment of the Emerging Industries Action Plan (EIAP). This will be aimed at providing a formal platform, that will a) reflect and elevate government-led technological programmes supporting new industrial development; and b) aid in the formal interdepartmental coordination and appropriate positioning of the various programmes. Furthermore, the EIAP will serve as a mechanism to increase market access (local and foreign) and improve investment certainty throughout the project life cycle. This will be achieved by securing firm commitments from developmental finance institutions (such as the Technology Innovation Agency and the IDC), in addition to providing clear value-propositions to potential local and foreign funding and industry partners.

Economic rationale

South Africa has a demonstrated capacity to generate large innovations with a potentially disruptive nature – i.e. innovations that help create new technologies, markets and value networks, in a manner that eventually dislodge and displace existing technologies, markets and value networks over a period of time. The DST is currently investing in number of potential high impact programmes that are a) cross-cutting (requiring close integration and support from other departments); b) have the potential to renew or establish new industries; and c) make a substantial contribution to longer term, sustainable competitiveness and successful penetration of new markets.

Examples of 'R&D-led industry development' programmes include titanium metal powder manufacturing development, fuel cell development and additive manufacturing.

Such programmes are knowledge-intensive and based on proprietary 'know-how', with corresponding markets often not yet established. This implies that, in view of the technical and market risks, development funding is difficult to secure. Besides the financial aspects, the speed of the process of technical and market development is deemed key to success.

In order to help mitigate the risks outlined above and to ensure interdepartmental and, where appropriate, industry, support and buy-in, the Emerging Industries Action Plan (EIAP) was devised, and is fully incorporated into, government's Medium Term Strategic Framework (MTSF).

Outcome

Accelerated technology development and commercialisation of R&D-led industry development projects, through improved interdepartmental coordination and improved funding/investment certainty.

Key milestones:

2014/15 Q2: Finalise the EIAP instrument and Terms of Reference.

2014/15 Q4: Secure stakeholder support and commitment for the evaluation of the first EIAP flagship project.

2015/16 Q4: First techno-economic evaluation completed and EIAP project selected and finalised.

Lead departments / agencies: DST

Supporting departments / agencies: **the dti**, NT, EDD, DoE, DoH, DMR, TIA, IDC, provincial government departments, Science Councils, universities, and private sector organisations as relevant.

2. Enhancing the participation of innovative enterprises and high-technology SMEs

The long-term intensification of South Africa's industrialisation process and movement towards a knowledge economy is to be realised through supporting both existing and new technology-based SMEs to access the STI knowledge infrastructure and innovation support programmes. Such support will better enable the conversion of innovative prototypes into commercial and industrial products and services.

SMEs are an essential component of the national industrial ecosystem. High-technology SMEs, in specific sectors such as engineering and instrumentation, have higher ratios of innovation per capita, compared with typical large firms. Such high-tech SMEs do, however, have close linkages to large firms, often providing either expert services or niche-manufacturing capabilities. Accelerated incentivisation of such high-tech SMEs has, therefore, to be properly attuned to their specific supply chains and geographical location (clusters/manufacturing zones). It must also pay careful attention to finding ways of overcoming their main constraint: access to capital and commercialisation support.

One particular area in which strongly incentivised high-tech SMEs can potentially have a significant impact is in rural communities and townships which typically lack sufficient infrastructure to support and sustain the growth of conventional large enterprises. Access to incubation services and facilities will help local enterprises to form partnerships with existing SMEs in the area, creating critical mass for new economic growth. Incubators, being 'light-footed' with respect to geographical location, have considerable potential to grow linkages with near and extended communities, unlock access to capital and skills, and attract the government support required to establish sustainable, thriving small businesses.

Nature of the intervention

The study seeks to investigate ways to close the gap between prototyping and industrial production, with a particular emphasis on creating the capacity to up-scale to small production batches.

Larger industry partners will be identified to support incubators as part of their corporate social responsibility and/or enterprise development programmes, while the expertise located in regional universities and technology stations will also be brought into play to help with the conversion of prototypes into market-ready products.

Economic rationale:

To promote and encourage interdisciplinary, multi-sectoral connectedness, based on partnerships between government, industry and research institutions, whilst encouraging the engagement of small and medium enterprises in research and technology development activities, and stimulating competency development in high- and emerging-technology firms.

Outcome

Improved linkages between SMEs and the knowledge-creation capabilities located in universities and science councils.

Key milestones:

2014/15 Q1:	Commission a study to identify the key constraints currently blocking the conversion of prototypes into marketable products.
2014/15 Q2:	Approved Memoranda of Understanding between rural communities/townships and 3 identified industry partners.
2014/15 Q3:	Support 5 incubators in rural communities and / or townships.
2014/15 Q4:	Support 3 university- or science council-based incubators.
2014/15 Q4:	Implement recommendations on increased prototype-to-product conversion.

Lead departments / agencies: **the dti**

Supporting departments / agencies: DST, EDD, Rural Development, TIA, IDC, provincial government departments, science councils, universities, SOEs, private sector organisations.

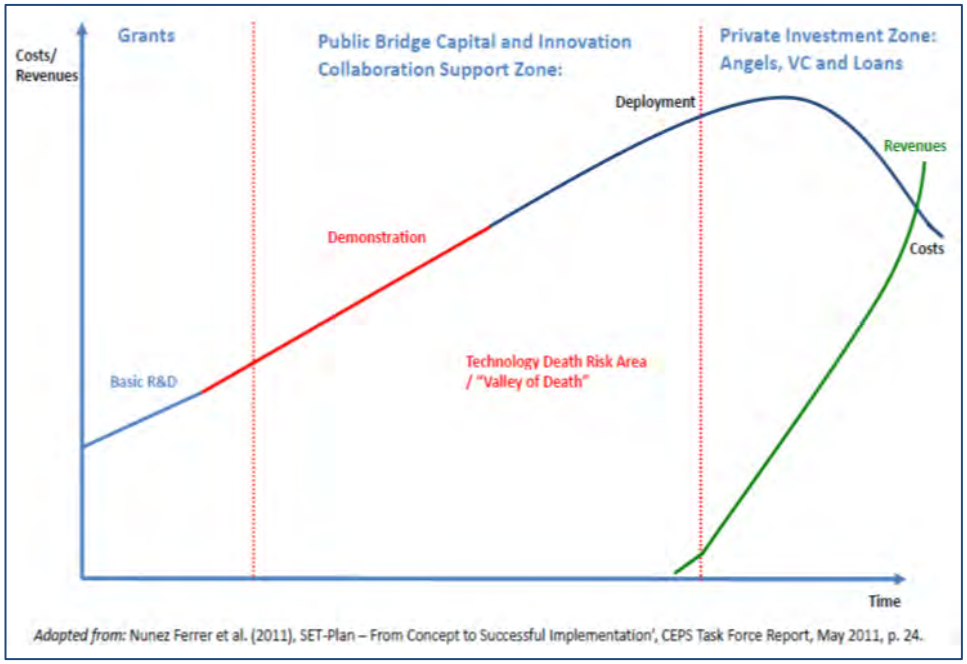
3. Technology Commercialisation Strategy

Technology commercialisation is understood as the process, or processes, of introducing a new product or production method into the market. This can include both new-to-the-world and new-to-the-market initiatives (the latter representing something new in a given context and not in absolute terms). Such innovations merit support to the extent that they have demonstrable potential to capture economic and/or social value.

Nature of the intervention

The Technology Commercialisation Strategy seeks to accelerate the journey between ideation and/or research and development and commercialisation, so as to assist start-ups and other players in the commercialisation space to overcome the 'valley of death' (i.e. the gap between R&D and the creation of successful products, processes and services. The strategy will provide guidance on investment strategies and on de-aligning with the inherent complexity of innovation exploitation.

Figure 26: Innovation Funding and Support Instruments along the Technology Cycle



Adapted from: Nunez Ferrer et al. (2011), SET-Plan – From Concept to Successful Implementation', CEPS Task Force Report, May 2011, p. 24.

The strategy is particularly crucial given the share of research carried out in public institutions and funded by government. Increasing awareness of commercialisation challenges and the involvement of partners with a commercial understanding in research decisions is important for assessing and responding to market needs. The commercialisation of technology presents significant challenges; so the strategy seeks to identify areas where support could be tailored to commercialise technology developed either by the public research institutions or by the private sector, taking into consideration the individual needs of the stakeholders at different stages along the commercialisation pathway.

Economic Rationale

To bridge the gap between the pre-production prototype stage and commercialisation; and also to enhance the probability of successfully commercialising new technologies.

Key milestones

2014/15 Q1: Finalise the Terms of Reference for the Technology Commercialisation Strategy.

2014/15 Q3: Hold workshops with relevant stakeholders and consolidate inputs.

2015/16 Q2: Approved Technology Commercialisation Strategy.

Co-leading departments/agencies: **the dti** and the DST

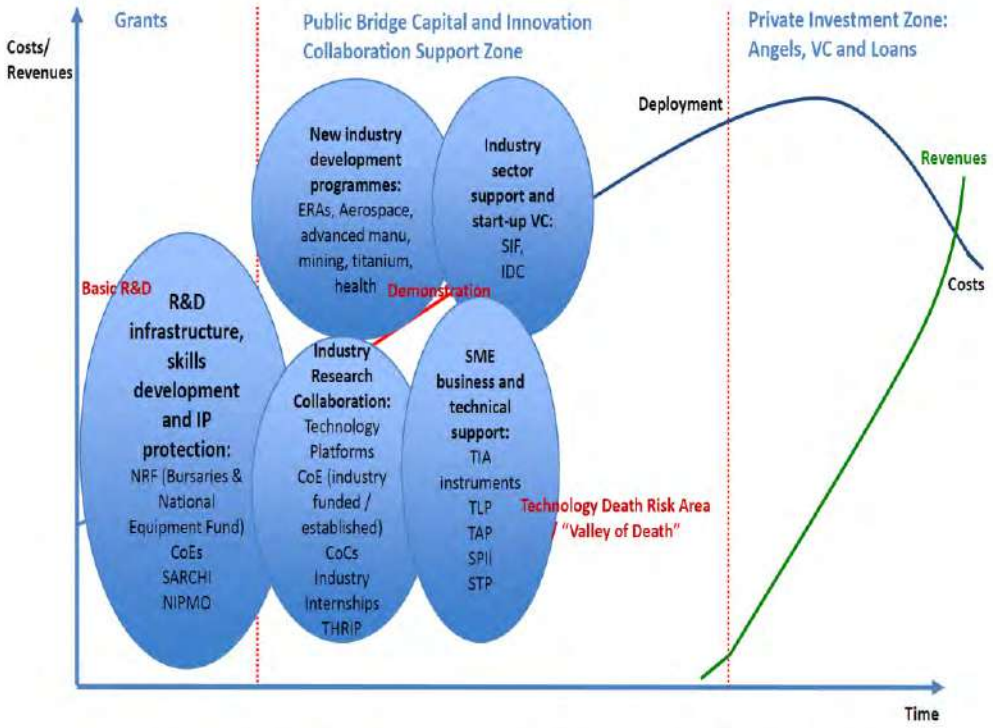
Supporting departments/agencies: NT, EDD, IDC, TIA, NRF, NIPMO, Universities, Science Councils, SOEs, private sector organisations.

4. Harmonisation of innovation support programmes

South Africa has strong science and technology capabilities and well-developed STI institutional frameworks. Concern has, however, been expressed about the inadequate levels of coherence and coordination in prioritisation and agenda-setting for science and technology innovation by, and between, government, business, academia and civil society. A significant strengthening the system is therefore required to achieve greater coherence in the use of R&D to drive social and economic development.

Whilst numerous innovation support initiatives are currently being implemented by government departments and agencies, their effectiveness continues to be limited by overlap, duplication and dispersion of efforts. Adequate information on existing support programmes is not readily available, limiting access to, and use of the support mechanisms they provide

Figure 27: Snapshot of South African Innovation Funding and Support Instruments along the Technology Cycle



Adapted from: Nunez Ferrer et al. (2011), SET-Plan – From Concept to Successful Implementation', CEPS Task Force Report, May 2011, p. 24.

Preliminary assessments of some of the existing innovation financing and support programmes of government reveal that there is collective, and at times, overlapping support for commercialisation from basic and applied R&D stages through to demonstration (see diagram above).

An emerging 'gap' that therefore needs to be filled is in the area of funding (and other) support for both the technology deployment and full commercialisation stages. Efforts to identify gaps and pinpoint opportunities for complementarity amongst the various available instruments are ongoing and will continue to inform DST and **dti** efforts to harmonise and coordinate their packages of support activities.

Economic Rationale

To facilitate harmonisation and synergies between existing and future innovation support programmes across departments and entities for increased impact on the growth of the economy.

Key milestones

2014/15 Q2: Finalise the Review of Innovation Support Programmes; identify potential for coordination across innovation support programmes and implement steps to facilitate harmonisation in the system.

2014/15 Q4: Establish and develop the requirements for a web-based platform to serve as a "one-stop-shop" for innovation support instruments.

2015/16 Q1: Develop a proposal for additional innovation instruments to meet system and stakeholder needs.

2015/16 Q3: Launch the beta version of the web platform and develop a user-guide.

Co-leading departments/agencies: DST and **the dti**

Supporting departments/agencies: EDD, NT, IDC, TIA, NRF, NIPMO.

Special Economic Zones (SEZ) and Industrial Development

Special Economic Zones (SEZs) are important instruments to support long-term industrial and economic development. **The dti** aims to enhance its efforts to create employment and economic growth by establishing a series of strong industrial bases across the country through SEZs, creating an environment conducive for both DFI and domestic investment and for the development of new strategic industrial capabilities.

In order to ensure that the SEZ programme is effective, a dedicated and integrated legislative framework for SEZs has been developed. This will enable government to effectively regulate and support all categories of SEZs, including the existing Industrial Development Zones (IDZs). This will mark a departure from the existing IDZ programme, which was not supported by dedicated legislation.

It is the intention that industrial production in the SEZ's will focus strongly on support for the manufacture of value-added goods. Once designated, the SEZs should create backward and forward linkages between companies inside and outside of these zones and build and strengthen localisation and supplier development programmes.

Key Opportunities

- Increased foreign and domestic investment;
- Rise in production output leading to increased exports of value added manufactured goods;
- Employment creation;
- Transfer of technology and skills development;
- Creation of economic linkage through supplier development;
- Regionally spread industrial development.

Constraints

- Supply and availability of energy;
- A shortage of skills in strategic manufacturing sectors as well as with respect to the necessary expertise to develop and manage SEZs;
- Port inefficiencies: in particular, container terminal capacity constraints;
- Underdeveloped infrastructure: including rail branch-lines, roads, electricity and water supply;
- High logistics costs;
- Complex regulatory and inter-governmental integration.

Key Action Programmes

1. Establishment of Industrial Clusters through SEZs

Nature of intervention

Designation of SEZs across the country to promote industrial development, export of value-added goods and job creation.

Economic rationale

Designation and development of SEZs will provide a platform for various areas and provinces of the country that will support implementation of the Industrial Policy Action Plan, regional industrial development strategies and the National Development Plan (NDP); to contribute towards strengthening the terms of trade of the country through export of value added commodities and creation of value chains and much needed jobs.

Key milestones

2014/15 Q1-Q4:	Rollout of Saldanha Bay IDZ (SBIDZ): Infrastructure support provided within the IDZ
2014/15 Q1-Q4	Establish SBIDZ Board
2014/15 Q3:	Sign MOU between **the dti** and Indonesia to facilitate collaboration on the establishment of Oil and Gas industry at Saldanha Bay
2014/15 Q1-Q4:	Secure 8 Investments into Saldanha Bay IDZ within Oil & Gas and Marine Repair Cluster.

Lead departments/agencies: **the dti**

Supporting departments / agencies: NT, NPC, EDD, DoE, DPE, DHA, DEA, Eskom, Transnet, SARS and the DFIs.

2. Implementation of SEZ Bill proposals

Nature of intervention

The Bill seeks to provide for the designation, development, promotion, operation and management of Special Economic Zones.

Economic rationale

To provide for the establishment of the Special Economic Zones Board; to regulate the application and issuing of Special Economic Zones operator permits; and to provide for the establishment of the Special Economic Zones Fund. The Bill will further support the acceleration of industrial development and the creation of a regionally diverse industrial economy through the establishment of new industrial hubs in underdeveloped regions of the country.

Outcomes

The concurrent and incremental establishment of SEZs within the appropriate legislative, regulatory, institutional and governance framework, leading to their consolidation and strengthening.

Key milestones

2014/15 Q2: SEZ Regulations and Guidelines (in line with the promulgation of the SEZ Act)

2014/15 Q2: Establishment of the SEZ Board (Once the SEZ Act has been promulgated)

2014/15 Q1-Q3: Implementation Protocols entered into by the Minister (**the dti**) and 4 government departments that are critical to the success of the SEZs

2014/15 Q3: Testing of the SEZ One Stop Shop Model.

2014/15 – 15/16: Ongoing establishment of SEZs.

3. Special economic zones: planning and development

Nature of intervention

Effective planning and development of Special Economic Zones, including identification of the strategic industrial opportunities and capabilities to be developed, the regions which can successfully host and anchor the development of the desired capabilities and the customisation of support measures in line with the needs of the desired industrial sectors and the host regions.

Economic rationale

SEZs cannot be developed in all the regions of the country at the same time. There are currently 10 concept proposals for special economic zones across the country. There is therefore a need to distinguish between those that are economically viable over the long-term and those that are not. Long-term plans for those that are economically viable will then be developed and implemented through a set of broad-based partnerships involving all three spheres of government, academia and research agencies and other key stakeholders.

Outcomes

Effective planning and development of SEZs, driven through a collaborative effort between and across the spheres of government – to be underpinned by a comprehensive support package that includes both industrial and social infrastructure, technology and innovation and human capital development. This is expected to lead to rapid development of industrial eco-systems in targeted regions; mastery of targeted industrial capabilities; attraction of foreign and domestic direct investment; and, finally, sustained growth and employment creation.

Key milestones:

2014/15 Q1**:** Pre-feasibility study reports for 8 proposed special economic zones

2014/15 Q4**:** 5 technical feasibility reports (from Q2).

4. SEZ Capacity Building Programme

Nature of intervention

SEZ-related skills and capacity development programme.

Economic rationale

The planning, development and management of Special Economic Zones in South Africa is a relatively new practice. The country needs to rapidly develop a large pool of new skills across the three spheres of government, including its agencies.

Outcomes

Increase in the quality and quantity of skilled professionals, across the three spheres of government, required for the planning, development and management of SEZs.

Key milestones:

2014/15 Q1: Planning and finalisation of logistical arrangements with the Chinese government on the training of South African officials on SEZ in China

2014/15 Q2: Recruitment of 30 candidates, across the country, to be trained in China on special economic zones planning, development and management.

2014/15 Q3: Training of 30 officials in China on the planning, development and management of special economic zones

Regional integration

A large number of African countries have recorded some of the highest growth rates in the world in recent years, some averaging 5% and upwards per annum from 2000. The main source of this growth - sustained by rising if highly uneven income levels - remains expansion in agriculture production, robust growth in services and a rise in oil production and mineral exports.

Whilst some estimates suggest that over 200 million Africans will enter the consumer goods market by 2015, the fact remains that, for now at least, the pattern of exchanging relatively lower-priced primary goods in exchange for highly priced manufactured goods remains in place. This keeps the continent as a whole largely confined to the lower end of global supply chains, heavily dependent on commodity production and unbeneficiated exports, with too little value-addition and few forward and backward linkages to other sectors of the economy. It is increasingly obvious that - as it is in other parts of the world - development of competitive manufacturing activities will have to be the game-changer as far as sustained and inclusive growth is concerned.

Therefore, a strategy combining development and implementation of national industrial strategies with systematic regional development initiatives remains critical to moving African manufacturing activities higher up the global value chain.

South Africa is committed to upping its role in fostering regional economic integration based on market integration, infrastructure development and enhanced connectivity between countries, whilst at the same time promoting industrial development to address productive capacity and supply side constraints.

Stronger regional markets are important for the industrialisation of Africa. Over the past year, South Africa has worked with fellow member states in the SADC and Tripartite Free Trade Area Negotiations to among others develop a practical agenda to build supply-side capacities through the development of strong regional value chains to underpin intra-regional growth and diversification of trade.

Work is currently under way to concretise areas of collaboration at both bilateral and multilateral levels. South Africa has already initiated discussions that have led to the identification of a significant number of projects for cooperation, practically demonstrating its commitment to the region and the continent.

Key Action Programmes

1. Work programme of the Regional Economic Communities

Nature of the intervention

Implementation of the work programme with Regional Economic Communities as agreed by SADC member states.

Economic Rationale

In pursuit of deeper regional integration South Africa must continue to upscale its work with fellow African states to implement agreed priorities, including the establishment of joint infrastructure development projects, development of regional value chains and the provision of technical assistance for policy and institutional development.

Outcome

Increased economic integration and co-operation between the regional economic communities.

Key milestones

2014 - 2018:	Work with fellow member states to implement the approved SADC Industrial Development Implementation Matrix to build on the Regional Industrial Development Strategy, prioritising agro-processing, mineral beneficiation and pharmaceuticals as initial sectors of focus.
2014 - 2016:	Work with member states to concretise areas of collaboration on the identified projects that support development of regional value chains in the region.
2014 - 2016:	Work with fellow member states to concretise areas of collaboration to promote productive capacity in the tripartite region.

2. Cross-border infrastructure and sector development

Nature of the intervention

This intervention seeks to promote a cross-border infrastructure and sector development project to complement the Free Trade Area (FTA) discussions to create a market of more than 600 million people in South, Central and East Africa.

Economic Rationale

A critical constraint to regional industrial development and integration is the continuing prevalence of weak cross-border infrastructure. Despite robust GDP growth, inadequate infrastructure remains a constraint to growth, choking integration efforts. Adequate infrastructure is essential for regional integration as it facilitates formation of large competitive markets in place of small isolated and inefficient ones. It also lowers the cost of production across sectors.

Outcome

Integrated cross-border infrastructure that facilitates investment, trade and development of regional value chains.

Key milestones

2014 - 2016:	Consolidate project preparation and development facilities, working with Development Finance Institutions.
2014 - 2016:	Promote regional sourcing in all regional infrastructure development programmes.
2014 - 2018:	Promote participation of South African manufacturers in mutually beneficial regional value chains particularly in agro-processing, mineral beneficiation and pharmaceuticals.
2014 – 2018:	Identify viable regional value chains and relevant levers to promote their development.

3. Technical Assistance

Nature of the intervention

This intervention seeks to promote sharing of best practice and building capacity.

Economic Rationale

South Africa has strong technical capacity at a number of levels and through a number of organisations which can be shared with the rest of the region. A number of DFIs in South Africa have MoUs with other DFIs across the continent to offer training in project planning, project appraisal, research and information management.

Outcome

Shared knowledge and capacity building between the regional economic communities.

Key milestone

2014 - 2016: Continue to cooperate with countries across the continent on capacity building programmes.

4. Co-operation on Standards, Quality Assurance, Metrology and Accreditation (Technical Infrastructure)

Nature of the intervention

South Africa will work with countries in the region to strengthen co-ordination of technical infrastructure activities, including standards, metrology and accreditation and conformity assessment services, mindful of the fact that the development of such capacity has a long lead time.

Economic Rationale

The capacity to comply with international standards, norms and technical regulations underpins the potential for economic and industrial growth. The strengthening of technical infrastructure capacity in African countries is a precondition of industrialisation efforts.

The dumping of cheap, sub-standard manufactured goods on African markets has sometimes led to the collapse of local industries and acted as a major barrier to industrial development. Tightened standards and conformity assessment are, therefore, of great importance in preventing the influx of sub-standard and injurious products into African markets.

Outcome

Improved quality and enhanced potential access of African products to export markets.

Key milestones

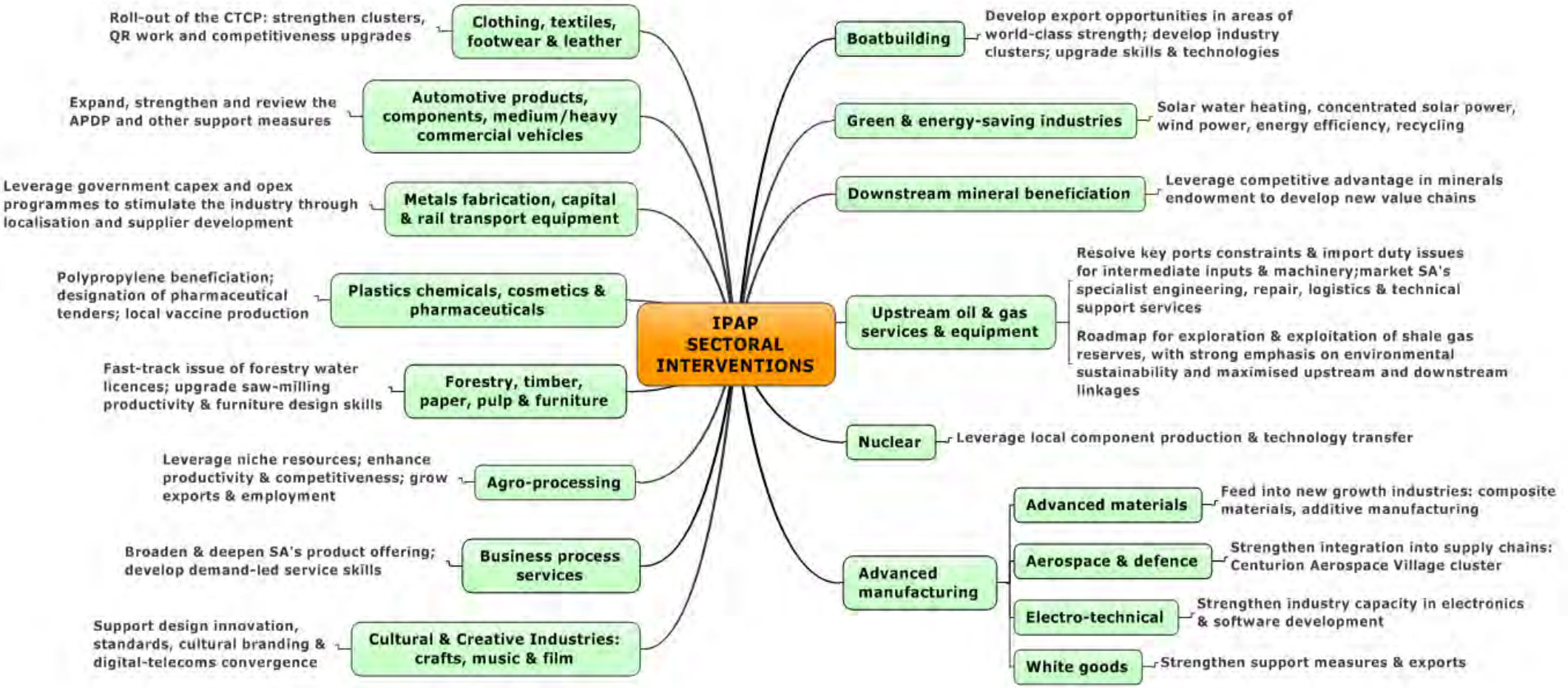
2014/15 Q4: 4 AFRAC pre- and peer evaluations carried out in order to obtain mutual recognition of conformity assessment of results in Africa. Also secure joint peer evaluation with ILAC and AFRAC to obtain international recognition for the SADC Accreditation Services.

2014/15 Q4: Regional integration of electricity transmission networks through African power pools (specifically Southern African and East African power pools (SAPP and EAPP). Both are affiliate members of AFSEC and support common adoption of standards for rural electrification using distributed generation - in particular photovoltaic (PV) systems.

2014/15 Q4: Work with AFRIMETS member states to further the adoption of OIML (Legal metrology) and CIPM (scientific metrology) directives and publications as the main strategy to implement the CIPM Mutual Recognition Arrangement and facilitate the harmonization of technical regulation on the continent.

Lead departments/ agencies: the dti, NMISA, NRCS, SABS, SANAS.

IPAP 2014/15 – 2016/17 INTERVENTIONS: MAIN SECTORAL FOCUS AREAS



SECTORAL INTERVENTIONS

Clothing, Textiles, Leather & Footwear

Sector profile

Since the introduction of the Clothing and Textiles Competitive Programme (CTCP) in 2009 there has been a significant positive impact on the clothing, textiles, leather and footwear (CTLF) sector in South Africa, notwithstanding ongoing challenges and threats.

The CTCP is subdivided into the Production Incentive Programme (PIP) and the Competitiveness Improvement Programme (CIP). These programmes have seen the stabilisation of the four sectors over the last four years and the creation of new, decent, sustainable jobs – this despite the fact that the CTCP was initially designed only to halt the rapid decline of the sector, under massive pressure from the cheap and illegal imports which had flooded in from the Far East. In its four years of operation a total of 12,680 new decent jobs have been created, as against 4,356 lost in the same period - giving a net gain of 8,324 jobs created. To date Government has made R2.488 bn available for the CTCP programmes, with 688 transactions approved and 362 companies receiving crucial support.

The programmes have been responsible for the establishment of both horizontal and vertical clusters which involve the whole textiles and footwear value chain from fibres and hides up to retailer outlets. The quick-response principles which have been established through these cluster programmes have enhanced the procurement of locally manufactured garments, footwear, leather goods and home textiles. The clusters offer formal platforms for cross-sectoral knowledge-sharing as they encompass members from across both the textile-clothing-retail value chain and the leather-footwear-retailer value chain. National clusters have also been established which include the National Leather and Footwear Cluster, the National Fashion Cluster, the National Cotton Cluster and the National Exotic Leather Cluster. These clusters promote new technology development, skills development, innovative processing techniques, world class manufacturing systems, individual company benchmarking against international norms and value chain alignment.

In December 2011, under the Preferential Public Procurement Framework Act (PPPFA), the four CTLF sectors were designated at 100 % local content threshold for all government tenders; and the required Instruction Note from the Minister of Finance was signed off in July 2012. This was done to support growth in these sectors and complement the CTCP.

Whilst there has been a marked improvement in procurement from government entities focusing on quality locally manufactured products instead of imported goods, there nevertheless remain indications of non-compliance across a range of government spheres.

The dti signed an MOU with the People's Republic of China to assist in providing state-of-the-art technical training for the CTLF sector, with the first (30-strong) group of trainees having left for China in November 2013 to embark on a two-month intensive training programme in textile and clothing design. Domestically, the CSIR's Textiles and Clothing Centre of Excellence in Port Elizabeth has overseen the skills development of a range of students studying for BSC, MTech and PhD degrees, in collaboration with Nelson Mandela Metropolitan University, Stellenbosch University, Durban University of Technology, Tshwane University of Technology, UNISA, Walter Sisulu University and the Cape Peninsula University of Technology. **The dti** is also working closely with the Fibre Processing and Manufacturing SETA to identify FET colleges country-wide which can be used to train technicians and technologists for the CTLF sectors, in collaboration with the National Clusters which have been established.

Constraints

The constraints facing the industry are well-documented and include:

- Recurrent periods of currency overvaluation and continuing volatility;
- The ongoing surge of global imports that has been under way since the expiry of the Multi-fibre Agreement;
- Illegal imports and fraudulent under-invoicing;
- Inadequate compliance with 'country of origin' labelling legislation;
- Lack of skilled personnel to take over from ageing industrial executives and senior management, who generally did not leave behind succession plans;
- Historical failure to develop and implement skills development plans, particularly for critical areas of operations and in production;
- Outdated capital equipment and technology resulting from inadequate capital investment and technology upgrading;
- An historical deficit with respect to innovation, research and development.

In order to address the ongoing challenges of illegal imports and under-invoicing the Clothing, Textiles, Footwear and Leather Forum (CTFLF) was established, with the enabling Terms of reference document signed on 15 November 2013. Chaired by the SARS Customs Unit, it includes **the dti**, all the CTLF sector associations and organised labour.

An immediate positive development was the introduction by the Forum of the Reference Price Initiative. This has already begun to deliver some appreciable results, with the total value of declared port-of-entry invoices having shown a significant recent increase. But the battle to reduce illegal imports remains far from won.

The key opportunity for the sectors is to recapture a bigger share of the domestic market share by implementing a range of interventions to improve global competitiveness. These include: a strong focus on product, process and delivery efficiencies; harnessing proximity to local retailers; and more effective clampdowns on under-invoicing and other illegal activities. The industry is gradually but steadily responding to the available instruments. These include:

- Support for the commercialisation of new technologies – which promises to give both the textile and footwear industries a new competitive edge;
- Opportunities for the beneficiation of new fibres now being grown in South Africa;
- Finalisation of the garment sizing initiative; and
- Effective implementation of the cluster programmes that have been established.

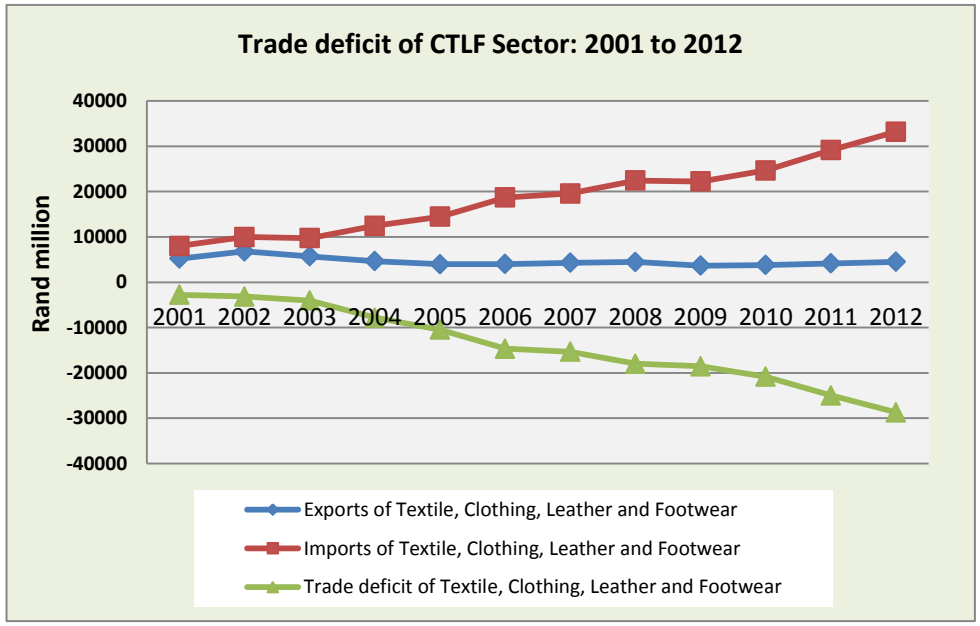
Sector economic data: GDP and trade balance

Variable	Contribution in 2013
Manufacturing value-add (% of GDP)	R12,4 billion (0,7%)
Manufacturing employment (% of Manufacturing informal employment)	108 000 (9,1%) 59 700 (FPM SETA information)
Trade balance:	-R20,7 billion

Figure 28: CTLF export performance

Source: Quantec

Figure 29: CTLF trade deficit trends Source



Source: Quantec

Key Action Programmes

1. Clothing, Textiles, Footwear and Leather Competitiveness Programme

Nature of the intervention

The programme will enable the sector to compete sustainably and effectively against international competitors in both the domestic and the export markets. In addition, company-level competitiveness will be improved substantially.

Economic rationale

The sector lags behind its international competitors in terms of conversion efficiencies and other key indicators of world-class manufacturing principles - of which quality, cost and delivery are the main drivers.

Outcomes

The programme will assist in building sustainable competitiveness. The roll-out of the CTCP will be extended to new companies in the textiles, clothing, and leather and footwear industries. New decent jobs will be created as the sector starts to grow.

Key milestone

2014/15 Q1-Q4: Ongoing roll-out of the PIP and CIP programmes. There will be a concerted focus on the cluster programmes, where successful impact is beginning to be realised.

Lead departments/agencies: **the dti** and National Treasury

Supporting department/agencies: IDC, EDD

2. Illegal imports programme

Nature of the intervention

The programme is designed to further clamp down on the illegal imports that are continuing to flood the country. It will also scale up the policing of country-of-origin labelling and SADC rules of origin.

Economic rationale

The elimination of illegal imports will help level the playing field for local manufacturers. There is a need to build on the successes so far achieved by the introduction of the "reference price" by SARS in the clothing sector, which is now being rolled out to the other sectors. The successful establishment of the CTLF Forum has created a platform upon which all stakeholders can jointly formulate strategies to combat illegal imports.

Outcome

Reduction of illegal imports will be rigorously pursued over the next three years, with a medium term view to their elimination.

Key milestone

2014/15 – 2016/17: Ongoing and targeted campaigns against under-invoicing and other illegal activities in the sector.

Lead departments/agencies: SARS, National Treasury, ITAC and **the dti**

Supporting departments/agencies: EDD

3. Skills development programme

Nature of the intervention

The programme will engage with the Department of Higher Education and Training, through the Fibre Processing and Manufacturing (FPM) SETA. Further Education and Training Colleges (FETs) will be identified to undertake skills development training for the sectors, in collaboration with the National Clusters. More students will be taken through **the dti**-PR China training programmes, beginning with a further 30 students in the new financial year.

Economic rationale

Skills development in the sector has been focused on operator level for a very long time through the SETA programmes, with very little attention being paid to training in technology and scientific skills development and many university programmes discontinued due to the lack of industry support. The programme seeks to reverse this pattern of decline.

Outcomes

Enhanced training and graduation of technicians, technologists, engineers, production managers and scientists for the CTLF sector.

Key milestone

2014/15 Q1- Q4: Ongoing roll-out of skills development programmes through CSIR Textiles and Clothing Centre of Excellence (TCCoE) based in Port Elizabeth, the FPM SETA, and ongoing collaboration with China in technical training programmes.

Lead departments/agencies: **the dti**,

Supporting departments/agencies: FPM SETA, CSIR, TEI's

4. Communal Hides Beneficiation

Nature of the intervention

The programme will continue to provide training to communal farmers and rural households in animal care methods designed to deliver high quality hides. The training focuses on slaughtering techniques, tanning and marketing. The programme was introduced in KwaZulu Natal during the 2013/14 financial year and will be extended to other South African Provinces.

Economic rationale

It is estimated that the communal farmers are responsible for nearly 30 % of the country's cattle livestock and this project will help in increasing the availability of quality hides into the market.

Outcomes

Higher quality hides will be obtained from communal farmers, at better prices, to ensure a lift in their household living standards.

Key milestones

2014/15 Q2: Finalise negotiations with Provincial government to extend programmes to the provinces concerned.

2014/15 Q4: Implementation of the research recommendations after sourcing the necessary funding.

Lead departments/agencies: **the dti**, Provincial Governments

Supporting departments/agencies: DOAF, EDD

5. Innovation and technology

Nature of the intervention

Distinct technologies will be identified and, where commercialisation is possible, this will be undertaken with relevant partners. The technologies to be pursued will include the establishment of a South African garment-sizing database using three-dimensional (3-D) body-scanner technology, computer-aided design (using 3-D scanner data) and the processing of new natural fibres such as flax, cashmere and kenaf. New technologies such as non-woven products and fibre-reinforced composites will be commercialised. Technologies in garment designing and servicing the fashion industries will also be pursued.

Economic rationale

South Africa cannot compete globally in commodity textiles. It has to focus on niche markets and not those sectors of the textile trade in which other developing economies are better positioned to compete.

Outcomes

The main outcome of the programme will be a transformed clothing industry, which will be in a position to compete globally with home-grown garment technologies and the establishment of the linen garment manufacturing industry

Key milestones

2014/15 Q1: Finalise the data consolidation using the 3 D Body Scanner technology

2014/15 Q4: Implementation of the Sizing Data by South African garment manufacturers. Commercial manufacturing of linen garments and home textiles implemented.

Lead departments/agencies: **the dti**

Supporting departments/agencies: UNISA and Cape Peninsula University of Technology.

6. Exotic Leather Cluster

Nature of intervention

The project will focus on the implementation of the Exotic Leather National Cluster programme which focused on crocodile hides in the previous financial year. The programme will include ostrich hides in the new financial year.

Economic rationale

The exotic leather industry has been working under the radar for a long time, with very little local beneficiation: historically, over 90 % of skins exported having been in raw form. The project will assist in implementing local beneficiation and promoting the export of finished high-value exotic leather goods like belts and bags. The intervention will focus on good animal husbandry in both ostrich and crocodile farming and skills development in the tanning of hides, using new technologies available in the global market. Collaboration with international brands and designers will be promoted.

Outcome

Exportation of high value-added exotic leather goods and manufacture of affordable exotic leather goods for the local hospitality industry and local retailers.

Key milestones

2014/15 Q1: Bring the ostrich industry association fully on board as a member of the National Exotic Leather Cluster

2014/15 Q2 – Q4: Establish partnerships between the National Exotic Leather Cluster and the FETs and begin the development of syllabi in collaboration with the Vaal University of Technology and the FDDI of India.

Lead departments/agencies: **the dti,** University of Pretoria, Vaal University of Technology

Supporting departments/agencies: IDC, EDD, FETs.

Automotives

Light Motor Vehicles, Medium and Heavy Commercial Vehicles, & Components

Sector profile

The automotive production sector remains a critical segment for most economies because of its cross-cutting linkages across several industries and services as well as its documented contribution to various economic development imperatives. The production of a vehicle incorporates a wide range of industrial activities and as such the sector is South Africa's leading manufacturing industry, contributing almost 7% of the country's more than R3,401 billion GDP in 2013.

As at year-end 2013, almost 100,000 people are employed in the manufacture of vehicles and components with a further 200,000 employed in the retail and repair segments. The total vehicle production volume in 2013 was approximately 550,000 vehicles compared to 540,000 units for 2012, translating into a mere 1.8% growth. This muted growth can, amongst other reasons, also be attributed to the prolonged strike action in the industry during the third quarter of 2013.

There are also a great number of imported automotive products in South Africa, leading to a trade deficit of R49.2 billion in 2012.

Economic impact

An estimated 160,000 direct jobs can be created in the industry in the period 2010 up till 2020. Outside of the traditional financial support measures that are in place through the APDP, on-going supplier development and increased levels of supply chain competitiveness have to play a complementary role in attracting higher levels of sector investment and further localisation opportunities

Key opportunities

The year 2013 saw the introduction of the APDP as a replacement to the MIDP. It was a year of learning, consolidation and realignment within South Africa's automotive production environment as local producers continue to synergise their businesses with the sector-specific programmes.

Two key objectives of the APDP are to raise volumes to 1.2 million vehicles per annum by 2020 and to substantially diversify and deepen the components supply chain. This will require on-going increases in minimum plant volume thresholds and identification of areas where greater economies of scale in component sourcing and/or value chain development are possible.

All of this needs to be done on the back of South Africa continuously developing itself as a globally competitive destination for automotive investment and production.

The medium and heavy commercial vehicle (MHCV) sector has also received – and continues to receive - its fair share of policy attention. A number of opportunities are being exploited to resuscitate bus production in South Africa as well as other MHCV sectors through boosting the roll-out of the Bus Rapid Transport Systems in Metros and implementing the revised state preferential procurement framework. Recent progress made in this regard includes updates to the Automotive Investment Scheme (AIS).

There continues to be growing demand for other MHCVs in areas such as infrastructure, construction, mining and agriculture, while at the same time a stronger focus continues to be placed on 'yellow metals'.

Like many industries globally, but more intensively than most, the automotive sector is impacted by the imperatives of climate change, with heightened demands for products with lower emission levels. A strong focus will need to be placed on ensuring that these technological developments are incorporated throughout the South African production landscape, with particular attention to be given to the opportunities afforded by Electric Vehicle (EV) production.

Constraints

Notwithstanding the successes achieved since 1995, the industry faces a number of challenges on its journey through the revised APDP paradigm. Economies of scale in assembly and the depth of domestic component manufacturing are not yet internationally optimal. A relatively small number of automotive components dominate the export basket and local content has tended to stagnate.

Several studies have drawn attention to gaps in the manufacturing competitiveness levels of automotive component suppliers. To address this issue, various supplier development initiatives have been implemented over the years, with the most recent iteration being **the dti**-driven Supplier Development Programme, delivered in conjunction with the Automotive Industry Development Centre and UNIDO. Following this multi-year program that ran from 2010 to end 2012, **the dti**, in consultation with industry stakeholders, has developed and launched the Automotive Supply Chain Competitiveness Initiative (ASCCI), which will drive various competitiveness improvement interventions across the domestic automotive value chain.

The rapid liberalisation of the MHCV sector as well as an apparent lack of co-ordination between various government agencies has in the recent past diminished government's ability to increase state procurement of buses or bus services in support of the sector. The procurement processes at the various agencies have also been marred by delays, leading to minimal local build of buses as timelines have become too compressed.

In parallel with the launch of the APDP, other significant developments on other complementary fronts were realised – including the design of the Electric Vehicle Roadmap and the MHCV strategy. In these circumstances, it was considered prudent to allow consolidation as manufacturers shaped their operations in line with the new frameworks.

Key Action Programmes

1. Review of the Automotive Production Development Programme (APDP) - Light Vehicle Review

Nature of the intervention

A review of the APDP, with a particular focus on light vehicles. This will require the collection of sufficient data to support informed proposals, recognising that many current industry practices are still influenced by the now discontinued MIDP. OEMs establish new volume and sourcing plans at new model introduction and not all OEMs have yet introduced new models on the APDP assumptions. A review of the changes for those that have already done so is required to provide valuable insight into the future industry outlook and as part of a broader review of the Light Vehicle Segment of the industry.

It must be noted that this Programme focuses on light vehicles and excludes any consideration of medium and heavy commercial vehicles and related transport products. However the light vehicle APDP already includes incentives for the production of components for medium and heavy commercials, so the Review should consider the appropriateness of these and their impact on the overall programme.

Economic Rationale:

The APDP parameters were established in 2008 and in the past five years major global and domestic events have impacted on expectations and projections. For example, the model prepared in 2008, on which the APDP parameters were based, projected local light vehicle production of 745,000 units for 2012.

In fact actual production achieved was 31% lower at 511,000, given the global recession and other prevailing factors. In contrast, most other regions have seen recovery and even growth from pre-crisis levels, with the notable exception of the EU where current volumes remain 16% below 2007 production. It is critical that certainty for investors is maintained whilst exploring opportunities for programme adjustments to recognise issues such as the likelihood of surplus credits resulting in lower local component production.

In this context it will be important to obtain more detailed information on the types of assistance provided by national and regional governments in other jurisdictions, in support of their automotive sectors. All these considerations must be viewed against the background of the lower starting base for the APDP. It is therefore important to reaffirm the major objectives of the APDP, namely production volumes of 1.2 million by 2020, with significantly higher levels of localisation.

Key milestones

2014/15 Q1-Q3:	Gathering of economic data, modelling and analysis of the subsector.
2014-2015:	Engagement with all stakeholders to identify and analyse all the data and key strategic options, including measures needed to achieve Programme objectives and scale these up where possible and appropriate.
2014/15 Q3:	Development of possible amendments and enhancements to the Programme to address issues and shortcomings, including identification of component sub-sectors which provide growth potential and the implementation of measures to assist these.
2014/15 Q4:	Submission of draft proposals to the Minister/Executive.

2. Competitiveness Improvement Initiatives

2013 saw the finalisation and launch of the Automotive Supply Chain Competitiveness Initiative (ASCCI). This collaboration between major auto manufacturing industry stakeholders will see various projects being implemented in the following years, with specific focus on increasing supplier capabilities, increased localisation levels better strategic guidance with regard to increasing the levels of automotive supply chain competitiveness in South Africa.

ASCCI activities are important in the context of enabling competitiveness, growth, employment creation and transformation in the South African automotive industry. Elevating productivity has been identified as one of the cornerstones of a competitive industry and in this regard an immediate focus is being placed on promoting the adoption of base operating standards at suppliers, and in particular tier 2 and SME suppliers.

With a view to enabling the enhanced sustainability of the intervention, this activity will be undertaken within the context of leveraging and elevating existing industry supply chain practices.

Nature of the intervention

Promote the adoption of base operating standards at automotive suppliers.

Economic rationale

Increased manufacturing competitiveness to drive further localisation, thus generating the potential for employment creation.

Outcomes

Enhanced supplier productivity through the establishment of base operating standards at suppliers, with a particular emphasis on tier 2 suppliers.

Key milestones

2014/15 Q1: Concept Note and scoped Project Plan: base operating standards.

2014/15 Q3: Approved Report and Implementation Plan.

2014/15 Q4: Project implementation.

2014/15 Q4: Preliminary project evaluation.

Lead departments/agencies: **the dti,** in conjunction with automotive industry stakeholders.

Supporting departments/agencies: EDD, Provincial and Local government.

Metal Fabrication, Capital & Rail Transport Equipment

Sector profile

- Ferrous Metals
  - Primary iron and steel (flat-rolled products, long products) and related downstream industries;
  - Metal products (tubes, structural steel, extrusions and wires).
- Non-ferrous Metals
  - Primary non-ferrous (aluminium, copper, rare earth, brass, lead, tin, zinc, precious metals fabrications and related downstream industries);
  - Jewellery (gold, silver and platinum group metals).
- Capital Equipment
  - Capital equipment and machinery;
  - Engineering and allied services.
- Rail transport equipment
  - Rail Rolling Stock (locomotives, electric multiple unit, wagons, and coaches);
  - Rail Infrastructure (signalling, perway, and overhead electric transmission).

These industries are at the centre of economic development because they produce products, applications and services used across the entire economy. This includes infrastructure programmes, construction, general engineering, mining, automotives and packaging. The metal fabrication, capital and rail transport equipment cluster of industries forms an important component of any industrialisation path and is a key driver of the manufacturing sector's overall competitiveness.

The industries in this cluster have rather different and uneven characteristics. For example, South Africa has well-developed niche capabilities in areas such as mining equipment and structural steel, which can effectively compete in global markets, while other sub-sectors such as the casting and tooling industries are stagnant or in decline.

Sector economic data

Variable	Contribution in 2012
Manufacturing value-add (% of GDP) • Basic iron and steel and basic non-ferrous metals • Metal fabrication, capital and rail transport equipment	 R23.9 billion (1.37%) R44.2 billion (2.54%)
Manufacturing employment (% of Manufacturing) • Basic iron and steel and basic non-ferrous metals • Metal fabrication, capital and rail transport equipment	 67,858 (5.90%) 275,251 (23.92%)
Trade balance: • Basic iron and steel and basic non-ferrous metals • Metal fabrication, capital and rail transport equipment	 R183 billion -R127 billion

Source: Quantec

Key opportunities

Key areas of opportunity for growing the sector or achieving higher impact include:

- Boosting the public infrastructure programme: this presents the single largest opportunity to stimulate the industry, and can be strengthened via a reduction of import leakage in the capital and operational expenditure programmes of SOCs - and, indeed, all spheres of Government. The localisation programme launched under the Presidential Infrastructure Coordinating Commission (PICC) will present opportunities for the sector.

- Continuing to embed prescribed local content in the sectors designated thus far.
- Opportunities presented by the Integrated Resource Plan 2010.
- Seizing export opportunities that exist in relation to infrastructure programmes on the African continent, especially the North-South Corridor.
- Mining turnkey projects in South Africa, the rest of Africa and South America.
- Opportunities to extend value chains through further downstream manufacturing initiatives, turning the lack of maturity in existing South African beneficiation chains into a strength.
- Taking advantage of the APDP to create additional opportunities for metal-component manufacturing.

Constraints

Current procurement practices by SOCs and government departments in relation to large contracts are not optimal:

- Uncompetitive input costs (electricity, logistics, raw materials):
  - Escalating electricity prices are rendering firms, especially high energy consumers, uncompetitive. This will be further exacerbated by the 8% tariff increase granted to Eskom over the next 5 years and compounded by further additional premiums likely to be imposed by the municipalities.
  - The import-parity pricing of major material inputs such as steel and aluminium remains a major impediment to the further development of these sectors.
  - Access and pricing of scrap metals.
  - Inefficiencies and high costs of road, rail and port infrastructure.
- Technological inefficiencies across the entire value chain:
  - Inadequate capital investment due to three decades of low demand has led to plant, machinery and equipment not being continuously upgraded or replaced.
  - Variable and often out-of-date production and technological capabilities have resulted in the industry losing ground in maintaining local content and being unable to effectively capture opportunities offered by both private and public capital expenditure programmes.
  - Severe skills shortages at artisan, technical, engineering and project management levels.
- Unequal trading platforms:
  - Higher tariffs and non-tariff barriers in potential markets.
  - Downward tariff pressures on a number of value-added products which is resulting in a surge of imports, particularly in low-value and high-volume manufactured goods.
- Leveraging procurement
  - A lack of competitive financing impedes the ability of South African companies - particularly lower-tier suppliers - to compete on an equal footing with foreign companies. Foreign companies often receive highly concessional export financing from their home countries' export banks or agencies.

Key Action Programmes

1. Leveraging the government's capital (CAPEX) and operational (OPEX) expenditure programmes and promoting localisation in the private sector

Nature of the intervention

This incorporates a strategic assessment of current and future government and private sector capital and operational expenditure programmes to facilitate standardisation and deepen localisation. The analysis will have to demonstrate adequate demand from CAPEX requirements and/or long-term OPEX opportunities to justify an investment by a supplier in a relevant industrial capability - and therefore the prioritisation of such industry/product.

This work will reinforce and complement localisation programmes, including designations that have already been implemented for the past 3 years. The areas that have already been designated include locomotives, coaches and EMU components related to Transnet and PRASA rolling stock renewal programmes; steel power pylons; and industrial valves. The Instruction Notes for designation of these fleets which specify the minimum local content thresholds were issued in 2012 and 2013.

Technical work on transformers, large-bore conveyance piping and rail signalling has also been completed and our localisation targets have been prioritised and will be communicated to the market in due course.

Economic rationale

Whilst improvements have been registered in smoothing out SOCs' procurement processes, long-term procurement planning remains a key challenge. In major areas, state procurement is still lumpy, *ad hoc* and has short delivery times undermining local manufacturing and potential investments in the associated supply chains.

Outcomes

Optimisation of localisation opportunities presented by state infrastructure programmes.

It is expected that the KAP will reduce import leakage; increase investments in key manufacturing processes and activities that supply into the domestic market; capture after-market opportunities; start to revive lost manufacturing capacity and increase employment and exports.

Key milestones

2014/2015 Q3: Completed detailed analysis for possible designation of overhead track equipment.

2014/2015 Q4: Analysis of the SA tariff structure and stage consignment facilities for products relevant to the localisation programme, in consultation with the industry; make recommendations to ITAC and SARS.

2014/2015 Q4: Rail Transport Equipment cluster enhancement programme developed.

2014/2015 Q4: Consolidated report on local manufacturers' capabilities to supply capital goods into the minerals value chain.

2015/2016 Q1: DPE/Transnet to submit supplier development and local content commitments on the 1,064 locomotives contract, aligned to the 2012 instruction note.

2015/2016 Q2: Completed detailed analysis for possible designation of steel tubes ranging from 12mm – 219mm.

2015/2016 Q2: Completed detailed analysis for possible designation of industrial pumps.

2015/2016 Q3: Preliminary report on the localisation of Transnet's 95-locomotive tender.

2015/2016 Q3: Completed detailed analysis for possible designation of coal- fired power station components.

2016/2017 Q4: Preliminary report on the localisation of PRASA rail signalling contract for Gauteng North.

2016/2017 Q4: **The dti** to review the rail rolling stock components designated under PPPFA and make adjustments to the levels of local content and components.

Lead departments: the dti and DPE

Supporting departments/agencies: DoT, EDD, NT, DST, SOCs and IDC.

2. National Tooling Initiative

Nature of the intervention

The National Tooling Initiative (NTI) is a joint programme between **the dti** and the tooling industry. The initiative comprises programmes aimed at rehabilitating the South African Tool, Die and Mould-Making industry. The NTI aims to increase and strengthen the human capacity and competitiveness of the tooling industry in South Africa.

In 2010, a new competency-based apprenticeship programme was introduced in partnership with FET colleges. The Foundation-level programme has recently been accredited by MERSETA as the Tool-room Assistant Qualification; whilst in 2013 the Toolmaker Apprenticeship qualification was approved by both QCTO and SAQA. From 2014 going forward, all new toolmaker apprenticeship intakes will be trained in accordance with the National Tooling Initiative curriculum. This skills development programme is internationally benchmarked through a partnership with the National Institute of Metalworking Skills of America (NIMS) and the Fraunhofer Institute of Germany.

In 2013, funding was secured from the National Skills Fund to up-scale and support the enrolment of 1,610 students from foundation phase to tool-maker engineer level over a three-year period.

Economic rationale

The erosion of the tooling industry over the past 20 years has led to the underperformance of the manufacturing sector and contributed significantly to the trade deficit as South Africa is a net importer of tools. In the immediate term, there will be prioritisation of skills development and training programmes to address the dire skills shortage.

Outcomes

The KAP will reduce reliance on imported tooling, particularly in the more advanced tooling segments, capture after-market opportunities, increase investments in tooling manufacturing, increase local content, enhance capacity in South Africa's tooling industry skills upgrading and increase employment, exports and manufacturing competitiveness.

Key milestones

2014/2015 Q1:	Master Toolmaker Trade Test developed.
2014/2015 Q4:	Tooling Engineer Modules and Curriculum developed.
2014/2015 Q2:	Launch of NECSA Tooling Centre of Excellence.
2014/2015 Q3:	Launch of Western Cape Tooling Centre of Excellence.
2014/2015 Q4:	540 students enrolled on the different levels of the apprenticeship programme.
2014/2015 Q4:	50 tooling engineering students enrolled on Level I.
2014/2015 Q3:	Launch of Tshwane Tooling Centre of Excellence.
2014/2015 Q2:	Launch of KZN Tooling Centre of Excellence.
2015/2016 Q4:	390 students enrolled on the different levels of the apprenticeship programme.
2015/2016 Q4:	40 tooling engineering students enrolled on Level II.
2016/2017 Q4:	**dti**-NTI Artisan skills development partnership programme project closeout report.

Lead department: **the dti**

Supporting departments/agencies: NT, DST, DHET, NTI, QCTO, SAQA, MERSETA and National Artisan Moderating Board (NAMB)

3. National Foundry Technology Network

Nature of the intervention

The National Foundry Technology Network (NFTN) is a foundry industry support initiative. Its key objective is to facilitate the development of a revitalised foundry industry through appropriate skills training, technology transfer and diffusion of state-of-the-art technologies. The programme is aimed at reversing the erosion of the industry which has negatively impacted on the competitiveness of manufacturing as a whole.

Economic rationale

The NFTN represents a concerted effort to reverse the significant decline that the foundry industry has experienced over the past two decades and the consequent weakening of the important linkages that this industry has with the entire manufacturing sector.

Outcomes

Reduced import leakage, increased human skills capacity, investments in key manufacturing processes and activities and employment creation.

Key milestones

2014/15 Q1-Q4: 15 young foundry men/women enrolled on the New Foundry Generation Forum programme aimed at developing future managers and address the aging skills challenge in the sector.

2014/15 Q1-Q4: 250 workers trained on the formal foundry qualifications (NQF 2–4).

2014/15 Q1-Q4: 20 foundries assisted under the competitiveness improvement programme.

2014/15 Q1-Q4: 3 new localisation and/or casting opportunities identified and supported.

2015/16 Q1-Q4: 15 young foundry men/women enrolled on the New Foundry Generation Forum programme aimed at developing future managers and address the aging skills challenge in the sector

2015/16 Q1: 20 apprentices in 1st year of the apprenticeship programme at the GP foundry training centre at EEC

2015/16 Q1-Q4: 250 workers trained on the formal foundry qualifications (NQF 2-4).

2015/16 Q1-Q4: 20 foundries assisted under the competitiveness improvement programme.

2015/16 Q1-Q4: 3 new localisation and/or casting opportunities identified and supported.

2016/17 Q1-Q4: 250 workers trained on the formal foundry qualifications (NQF 4).

2016/17 Q1– Q4: 20 foundries assisted under the competitiveness improvement programme.

2016/17 Q1–Q4: 20 apprentices in 1st year of the apprenticeship programme at the GP foundry training centre at Ekurhuleni East College.

2016/17 Q3: NFTN to host the World Foundry Forum in South Africa.

Lead department: **the dti**

Supporting departments/agencies: NT, DST, EDD, DHET, NFTN, Merseta.

Mineral Beneficiation (Upstream and Downstream)

SA faces the challenge of diversifying away from mining and resource extraction towards a manufacturing, value-adding and job-creating economy. Minerals downstream beneficiation and minerals upstream (inputs) have been identified as a key 'pillar' of SA's reindustrialisation push. The aim is to ensure that more value is added to domestic mineral products before export, so as to extract greater economic value and employment from the country's remaining mineral resources, while at the same time using minerals sector demand to develop mining input industries (capital goods, consumables and services). Although South Africa is endowed with exceptional mineral resources, further downstream and upstream beneficiation has not fully reached its economic potential, mainly due to structural conditions within key value-chains.

the dti has completed a research project that analysed backward and forward beneficiation potential in four key value-chains (ferrous metals; polymers; titanium, platinum group metals) and developed strategies to increase the localisation of mining inputs (capital goods, consumables and services).

The next phase is to unpack the high-level analysis and identify key potential projects in the selected value chains that can be taken forward to support beneficiation in SA. The 2014/15 IPAP will focus on the iron-ore/steel, polymers and titanium value chains as well as leveraging state tariffs for beneficiation.

Key Action Programmes

1. Leveraging state tariffs for mineral value addition

Nature of the intervention

Both government and business have recognised the role of appropriate infrastructure as a driver of economic growth in South Africa, and called for the cost of doing business to be reduced in order to enhance the competitiveness of the country's goods and services. In this regard, government has identified the crucial role that SOCs play in achieving the strategic objectives of job creation, reducing the cost of doing business, poverty alleviation and positioning SA as the investment destination of choice in Africa.

In active response to these objectives the Transnet National Ports Authority (TNPA) has decided to introduce a Beneficiation Promotion Programme (BPP) to incorporate the government's industrial policy into the determination of cargo dues tariffs.

The TNPA's pricing strategy proposes a reduction in export cargo dues on beneficiated cargo, with varying levels of discount according to the beneficiation stage of the exported goods. TNPA's pricing strategy on BPP tariffs is largely based on the **dti** framework for stages of beneficiation as outlined in the Metals Sector Strategy. **The dti** has already started working with TNPA on the Mineral Value Chain Research Project, which is aimed at clearly defining the stages of beneficiation for the various minerals.

Similar strategies should be assessed for other state "tariffs" such as rail (Transnet), energy (Eskom), finance (IDC and DBSA) and, possibly, roads (SANRAL). The relevant SOCs and Departments will be engaged to assess such beneficiation incentives.

The intervention is therefore aimed at defining the stages of beneficiation for the various mineral and mineral products exported, where Stage 1 minerals are not beneficiated (i.e. primary action of mining such as ore or concentrate), Stage 2 involves limited beneficiation (i.e. converting concentrate into a bulk tonnage intermediate product such as metal or alloy), Stage 3 includes higher value-adding processing (i.e. semi-fabricated products) and Stage 4 represents the maximum possible value addition (i.e. finished goods ready for sale).

Economic rationale

High value-added mineral products like metal automotive and aerospace components, capital and rail transport equipment are produced through labour-intensive manufacturing processes resulting in increased revenue and job creation and providing opportunities for the development and application of technology by skilled workers. Lower tariffs of up to 60-80% are being considered by TNPA for Stage 4 mineral products, providing a significant incentive for the export of value-added products as opposed to unbeneficiated minerals.

Outcomes

- Clear definition of the stages of beneficiation for each mineral and/or mineral product to enable the TNPA to determine the appropriate level of tariff reduction or incentive for each stage.
- Clarity on the efficacy of using other state tariffs to promote beneficiation.

Key Milestones

2014/15 Q2: Analysis of current mineral exports from SA and the tariffs applied.

2014/15 Q3: Research and determine the stages of beneficiation for all exported minerals and/or mineral products with recommended minimum levels of beneficiation.

2014/15 Q4: Report providing clear definitions and criteria for the stages of beneficiation for each mineral and/or mineral product with recommendations for the level of tariff reduction.

Lead departments/agencies: **the dti**, Transnet (TNPA, TFR), Eskom, SANRAL.

Supporting departments/agencies: **the dti**, the DMR, DPE, EDD, DOT.

2. Viability of an Iron/Steel and Titanium Pigment Industrial Complex

Nature of intervention

The dti minerals value chain studies have identified the possibility of locating an iron and titanium complex on the Bushveld titano-magnetites to produce steel and titanium pigment. Several private sector projects are currently assessing the mining of these resources. This intervention will assess the viability of an iron/Steel and Titanium Complex comprising mining, smelting, iron and steel production (for the domestic and export markets) and titanium pigment production (for export).

Economic Rationale

Iron ore/steel production is currently severely constrained by monopoly pricing (IPP) in the domestic market. South Africa has huge potential resources of iron-ore and titanium in the Bushveld Complex (BC) magnetites which could underpin the development of a world class steel and titanium plant. The assessment (scan) of the economic viability of a combined iron/steel and titanium industrial complex will indicate whether such a project would be viable and what support or facilitation it may need.

Outcome

The scoping study is aimed at identifying both existing constraints/technology gaps and the interventions that will be needed for the establishment of an integrated iron/steel and titanium pigment industrial complex. The exercise will include identification of potential investors and technology providers. If viable, the longer-term outcome will be the establishment of the industrial complex with positive fiscal, employment and balance of payments impacts, particularly in downstream iron/steel-based manufacturing enterprises.

Key Milestones

2014/15 Q1: Development of the terms of reference.

2014/15 Q2: Initiate study and engage with key stakeholders.

2014/15 Q3-Q4: Assess the economic viability and determine requisite interventions for the establishment of the putative Fe/Ti industrial complex.

Lead departments/agencies: **the dti**, IDC

Supporting departments/agencies: **the dti**, EDD, DMR, DPE

Agro-Processing

Sector profile

Agro-processing has been identified as a segment with the potential to actualise a number of the macroeconomic objectives set out in both the National Development Plan (NDP) and the New Growth Path (NGP).

A key characteristic of the agro-processing sector is its strong up- and downstream linkages. Upstream, the sector links to primary agriculture across a wide variety of farming models and products. Downstream, agro-processing outputs are both intermediate products to which further value is added and final goods that are marketed through wholesale and retail chains, plus a diverse array of restaurants, pubs, shebeens and fast-food franchises. This link with agriculture makes it critical for employment creation and poverty eradication.

Despite the continued ripple effect of the 2008 economic meltdown, the food processing sub-sector continues to show resilience; and is also one the largest domestic manufacturing sectors by employment – providing an estimated of 207,893 jobs as at the 3rd quarter of 2013. (This, however, against a backdrop of job losses in other sub-sectors). Food processing is also, of course, significant in terms of the value-addition it brings to primary agricultural products.

For the purposes of data continuity, the agro-processing sector is defined in statistical terms by the food-processing and beverage manufacturing sub-sectors only.

Sector economic data

Variables	Contribution in 3rd Q of 2013
Agro-processing (% of GDP in manufacturing)	R7.7bn (16. %)
Agro-processing employment (% of Manufacturing)	207,893 (18.2%)
Trade balance	-R1.4bn[9]

Sources: Quantec and StatsSA

[9] Based on 2012 Quantec data

Key opportunities

The agriculture and agro-processing value chain is defined by a sizable labour/capital ratio L/C of (1:5.54) which makes it an important source of labour-intensive growth. In addition, this value chain is central to government's rural development and smallholder farmer development objectives.

The agro-processing sector's economic performance is closely related to the overall rate of economic growth in South Africa and in key export markets. Export-focused sub-sectors such as horticulture and aquaculture are likely in the near term to experience stagnant or slow growth in traditional export markets such as the EU and the US. Substantially more attractive opportunities are likely to be found and must be explored in Asia and sub-Saharan Africa, where the combination of positive growth rates and rapid urbanisation is creating significant opportunities for the export of middle-income consumer products. The Middle East and BRICS continue to represent important new markets for upper-income consumer products such as confectionery, fruit juices, indigenous teas, fruits and wine.

One important emerging opportunity lies in the processing of cassava into starch, which has a wide number of applications in confectionery, sweeteners, textiles, paper, animal feed and alcohol production. Currently, however, supplies of cassava are largely sourced and imported from South East Asia.

The Department of Energy recently announced that as of October 2015 it will be mandatory to blend 2% of locally produced bioethanol into petrol. Sorghum and soybeans will be used as the respective biofuels and biodiesel feedstocks. This will potentially create a R15 billion p.a. bio-fuels industry, with a second-order effect of creating 15,000 to 18,000 direct jobs in the various agricultural value chains alone.

The milling sector - which still remains highly concentrated in the hands of a few major industry players – is in serious need of increased competition and innovation into alternative products. This will require continuous, up-scaled support for small-scale production plants that can be located close to both maize and soybean feedstocks and major consumption markets. While these plants do not typically create large numbers of jobs, their main impact is in reducing the cost of key basic food products such as maize-meal and intermediate goods such as soybean meal for cattle and poultry production. Additionally, wet milling presents an opportunity that can be explored in parallel to traditional milling in order to meet increasing demand for tortilla flour by the economies of South America.

Much as South Africa is home to a well-developed broiler industry which has over the years built superior capabilities, it has in the recent past seen a surge in imports which threatens its survival. This can potentially be countered by building up a formidable export base for companies targeting the broader African and Asian markets; and, in so doing, greatly improve both the domestic and global competitiveness of the South African broiler meat industry.

Constraints

Given the diversity of the sub-sectors that make up the agro-processing sector, the constraints are relatively sector-specific. Export-focused producers in the wine and spirit, fresh and canned fruit, indigenous tea and flowers, confectionery, processed food, fruit juice and aquaculture subsectors face constraints that are related to developed-country trade policy – including subsidies, tariffs, and sanitary and phyto-sanitary standards (SPS).

This necessitates more sophisticated export intelligence, better export marketing, a more visible South African 'presence' and dynamic product innovation and customisation to fight for market share in the developed economies. Producers primarily focused on supplying the domestic market – such as the soybean-processing, fruit juice, processed vegetables, confectionery, meat and processed food sub-sectors – currently face heightened competition from imports. Import competition is particularly severe in the poultry, frozen vegetables, wheat, pasta and confectionery subsectors.

Increased import penetration has coincided with rising domestic input cost pressures including electricity, water, road transport, fertiliser and seed costs. The resulting margin squeeze has led to significant job losses and ongoing under-investment in productivity-enhancing measures and plant-level maintenance. **the dti** will address these constraints on a sub-sector basis, focusing on developing comprehensive interventions that will include, where applicable, trade measures, support for local procurement, financial assistance for productivity-enhancing investments, financial assistance for the development of competitive 'clusters' and appropriate infrastructure development.

Key Action Programmes

1. Development of emerging broiler producers

Nature of the intervention:

Facilitate the development and entry of successful emerging poultry producers into the main-stream broiler value chain in order to grow the domestic industry as well as improve its competitiveness.

Economic rationale:

Barriers to entry into the broiler industry are relatively low, which in turn presents opportunities to create economically viable communities with possibilities for increasing gainful employment. Emerging broiler producers do, however, face numerous challenges: not only rising input costs, but also poor market information and weak knowledge management capabilities. This initiative will contribute towards the development of successful "emerging broiler clusters" by unblocking the constraints that currently prevent host communities from effective participation in the mainstream broiler value chain. Through the promotion of these strategic clusters, both by government and the private sector, the domestic broiler industry will be placed on a stronger growth and competitiveness trajectory.

Outcome:

Increased participation and integration of emerging producers into the domestic broiler value chain. This will contribute towards both import replacement and mitigation of South Africa's negative trade balance.

Key milestones:

2014/15 Q1-Q2:	Mapping of existing hatcheries and contract growers towards the development of new broiler clusters.
2014/15 Q3-Q4:	Review and package for funding at least 1 broiler investment project targeting small scale producers.
2014/15 Q4:	Implement at least one small scale project

Lead department: the dti

Supporting departments/agencies: DRDLR, DAFF, DPFO/SAPA, IDC, EDD.

2. Development of a small-scale dry and wet milling industry

Nature of the intervention

This intervention will facilitate the entry of small-scale maize millers into the South African market. They are expected to be particularly competitive in rural areas, where high transport and logistics costs raise the price of basic food products. The intervention consists of the packaging of a range of support measures from **the dti** to facilitate the market entry of small-scale maize mills.

Economic rationale

The maize milling sector is highly concentrated and domestic prices appear to be subject to anti-competitive practices. There is significant potential for the development of a class of small-scale millers, which could sustainably reduce the current high cost of basic food products, contributing to poverty reduction and alleviating pressure on real wages (given that lower-income workers spend a substantial proportion of their income on basic food products).

Outcome

Small-scale maize milling enterprises producing for local markets at competitive prices, thereby creating jobs and contributing to enterprise development and poverty alleviation.

Key milestones

2014/15 Q1: **the dti**, FABCOS, and the NMC to facilitate the roll-out of small-scale maize milling in one additional province.

2014/15 Q3: **the dti**, FoodBev Seta and the NMC to develop a milling skills programme.

2014/15 Q4: **the dti** to facilitate the roll-out of small-scale maize milling and branding of the in-house products of FABCOS (home-grown) in one additional province.

Lead departments/agencies: the dti

Supporting departments/agencies: IDC**,** EDD, NMC, Provincial Departments of Economic Development, FABCOS and Old Mutual Masisizane Fund.

3. Enhancement of production efficiency in the fruit and vegetable Canning industry

Nature of the intervention

Implementation of a PPP fruit canning initiative designed to raise competitiveness for the long-term sustainability of the fruit canning industry.

Economic rationale

The fruit canning industry employs approximately 11,000 factory workers, more than 500 administrative employees and ±17,000 farm workers on 1,200 farm units that supply the fruit to factories. These are situated in economically depressed localities with limited alternative employment opportunities, making the fruit canning industry a major source of employment in these areas.

Outcomes

The creation of a sustainable platform for the long-term growth and competitiveness of the industry.

Key milestones

2014/15 Q1: In collaboration with the NCPC-SA, **the dti** will identify and recruit companies from the South African Fruits and Vegetables Canners Association (SAFVCA) to participate in the Resource Efficient and Cleaner Production Programme (RECPP). It will then conduct RECPP training and awareness courses for employees at the companies and roll out the programme in the identified companies.

2014/15 Q1-2: **the dti** will support initiatives of SAFVCA in terms of market access and recruit 6 companies to participate in the RECPP.

2014/15 Q2: In further collaboration with the NCPC-SA, **the dti** will facilitate the application processes of companies seeking to access the incentive grants of the MCEP for implementation of the Resource Efficient and Cleaner Production (RECP) Recommendation.

2014/15 Q3: In collaboration with SAFVCA, **the dti** will facilitate a transformation programme that will establish new fruit orchards in the Western Cape.

Lead departments/departments: NCPC-SA,

Supporting departments/agencies: IDC, Western Cape Department of Agriculture, SAFVCA and PSA.

4. Food-processing sector skills programme

Nature of the intervention

Establishment of an apprenticeship programme that will skill and prepare the youth for participation in the food-processing labour market.

Economic rationale

The deep-seated unemployment problem in South Africa is structural: that is to say, there is a serious skills mismatch between what is required by the economy and the qualifications turned out by training institutions. As a consequence, a large segment of the country's youth requires effective alternative skills development and education opportunities if they are to become effectively employable.

Outcome

Enhancing skills development amongst the youth in order to grow employment in the food-processing sub-sector.

Key milestones

2014/15 Q1: **the dti**, FoodBev Seta and DHE to develop a proposal for a skills programme to be implemented by food processing companies.

2014/15 Q2: **the dti**, to recruit, select youth and participating companies for the food skills programme.

2014/15 Q3-Q4: Implementation of the food skills programme

Lead /departments/ Agencies: the dti, FoodBev, Food Processing Companies and the DHE.

5. Commercialisation of industrial cassava starch

Nature of the intervention

Increase starch production in the cassava industry to replace imports of starch and create jobs in the domestic economy.

Economic rationale

There is a continued demand for cassava starch in industrial applications within the papermaking industry locally. It is used to manage down processing costs, improve paper dry strength and surface quality. Currently supplies are sourced and imported from South East Asia. South Africa has the appropriate geography and conditions for the cultivation and processing of cassava.

Outcome

Reducing dependence on imports (which compounds the trade deficit) and creation of a new industry.

Key milestones

2014/15 Q1: Conduct a feasibility study to determine the commercial viability of a cassava starch industry.

2014/15 Q2: Identify small scale farmers to participate in the programme.

2014/15 Q3-Q4: Conduct field trials for cassava production in selected areas in South Africa.

Lead departments/departments/ Agencies: the dti, Department of Rural Development and Land Reform, DAFF, IDC, and TIA.

Aquaculture

1. Promote public and private investments in aquaculture

Nature of the intervention

This intervention is intended to leverage substantially increased investment levels in the aquaculture sector.

Economic rationale

Even though South Africa's contribution of 6,600 tons is very minimal in relation to global aquaculture production, it has demonstrated consistent modest growth over the past few years. It is now a reality that aquaculture in South Africa has the potential to supplement the supply of wild stock with cultured fish products. DFIs and private financiers have begun to show an appetite for investing in this sub-sector, now that its commercial viability has been adequately proven; while at the same time domestic markets are starting to warm up to farmed marine finfish products - particularly dusky kob and fresh water species such as trout and catfish.

Outcome

Increased investments in both marine and freshwater fish species, for both domestic and export markets, in order to create employment in rural areas.

Key milestones

2014/15 Q1-Q2:	Review and package 1 investment proposal targeting new black entrants into the aquaculture sector.
2014/15 Q3-Q4:	Project preparation towards implementation of at least 1 project commences.
2014/15 Q4:	Implementation and Monitoring of at least 1 project commences.

Lead departments/agencies: the dti, DAFF

Supporting departments/agencies: DFIs, Provincial government departments and agencies, industry.

Forestry, Timber, Paper, Pulp and Furniture

Sawmilling sector

Sector Profile

The South African Forestry Sector is dominated by the pulp and paper industry, which consumed close to 13 million m^3 of timber compared to 4.4 million m^3 by the sawmilling industry (the next largest industry). The total commercial timber plantation area in 2010/2011 was 1,273,357 ha (compared to 1,271,286 ha in 2009/2010). The sawmilling industry supplies timber and timber products to processing industries such as furniture manufacturing. There are about 200 sawmills countrywide, mainly concentrated in KZN, the Eastern Cape, Mpumalanga and Limpopo.

The sector is a major source of employment in rural areas and has high multiplier effects. The sawmilling industry is labour intensive and has a high ratio of workers to volume of round-wood timber processed, with approximately 30,000 people directly and indirectly employed.

Key constraints

- **Shortage of raw materials:** The forestry industry is highly vertically integrated. Large companies obtain their raw material from their own plantations, leaving small and medium enterprises in the saw milling and furniture industries tied into short timber supply contracts with DAFF, SAFCOL and rendering them highly vulnerable to recurrent supply shortages.
- **Low recovery rates:** The sawmilling industry is characterised by many smaller companies using out-dated and inefficient processing equipment. This results in low recovery rates and waste of valuable resources. Considering that the cost of logs makes up to 50% of the total cost in sawmills, this is an important constraint. Improving the recovery rates of sawmills will contribute significantly to improving competitiveness within the sector.

Key opportunities

- The sector plays a critical role in supplying raw materials for the production of value-added products such as furniture components, low-cost housing components, doors, windows, window frames and similar building products. Its competitiveness thus affects a number of downstream industries.

- Small-scale sawmills have the opportunity of organising themselves into cooperatives/clusters to increase the combined size of their orders in securing log supplies.
- The sector has strong potential for job creation in rural communities.

Key Action Programmes

1. Productivity improvement through technology upgrading

Nature of the intervention

This programme is intended to assist small- and medium-scale sawmills to improve their productivity through technology upgrading.

Economic rationale

Small to medium sawmills use old technology which makes their businesses uncompetitive and unsustainable**.**

Outcome

Improved recovery rate and competitiveness of the sawmilling industry.

Key milestones

2014/15 Q1: T**he dti** to identify and consult 4 small-scale sawmilling companies and conduct a SWOT Analysis of these enterprises.

2014/15 Q2: **The dti** to develop an action plan report for the identified companies.

2014/15 Q3-Q4: T**he dti** to facilitate the application process for funding of equipment and machinery.

Lead departments/agencies: the dti

Supporting departments/agencies: SEDA**,** Fibre Processing and Manufacturing SETA.

Furniture manufacturing

Furniture Sector Profile

The furniture industry currently employs approximately 29,000 people, with 2,200 registered establishments involved in the manufacture of furniture, bedding and upholstery. The furniture industry is labour-intensive and contributes 0.95% to manufacturing GDP and 1.6% to manufacturing employment.

Sector Opportunities

The furniture sector has strong potential to create employment, especially in poor rural areas. But this will require much improved productivity and competitiveness, based on systematic interventions to upgrade skills and enhance innovation within a framework of cluster development. Cluster development is the obvious route towards realising significant economies of scale through shared infrastructure, shared and reduced input costs and better information exchange. Once recapitalised and armed with upgraded design skills, clustered companies will be much better able to access new markets.

Sector Constraints

The sector is facing constraints that are holding back development in the furniture sector and negatively affecting the sector's competitiveness, namely:

- Shortage of skills, especially technical and high-level skills like design.
- Lack of research and development to support industry growth.
- Influx of cheap imports and the challenge of getting retailers to buy locally produced products. The survival of the industry will largely depend on interventions to deal with the escalation of imports and increase procurement of locally manufactured products.
- Wood raw material supply, especially for small enterprises.
- Difficulties in enforcing quality and standards measures to differentiate local products from cheap, low-quality imports. Although some quality standards exist, they are currently not enforceable. There is also a need to align the standards with public procurement.

2. Furniture Design Program

Nature of the intervention

The program seeks to support skills development in the sector - especially high-level design skills - that will help address market failures, encourage specialisation and improve productivity.

Economic rationale

The South African furniture manufacturing industry lacks sufficient tuition specifically geared towards furniture design. The accredited training providers that do exist tend to be limited as to what they can offer, and this in turn reflects in the familiar mismatch between the skills required by the industry and those that are in practice available, leaving it uncompetitive in relation to its international competitors. Hence, the need to build up a major set of training interventions over time.

Outcomes

Improved competitiveness of the industry through higher design content in domestically produced furniture.

Key milestones

2014/15 Q1: To develop a roadmap for furniture design workshops.

2014/15 Q2: **the dti**, SABS Design Institute and FPM Seta to collaborate on implementing the design workshop.

2014/15 Q3/4: Design program rolled out in the industry.

Lead /departments: the dti, SABS Design Institute, FPM Seta.

3. Furniture Cluster Development

Nature of the intervention

Cluster development in the furniture sector. Companies to be located in the same geographical areas, with targeting of furniture design trainees exiting the incubators.

Economic rationale

SMMEs in the furniture industry are not able to access a reliable market. This is mainly due to their size, and its impact on their ability to supply required quantities and quality. This affects their level of competitiveness and sustainability.

The establishment of clusters will begin to address the size constraints upon small enterprises' access to market. SMME clusters can be defined as groups of small and medium sized enterprises located in a relatively confined geographic area engaged in the production of the same sorts of products. Clustered SMMEs can deliver economies of scale through shared physical infrastructure, information and knowledge exchange and can improve competitiveness through specialisation and co-operation in the joint marketing of products.

Outcome

Competitive furniture clusters.

Key milestones

2014/15 Q1: Develop TOR for the cluster management

2014/15 Q2: Development Business Plan and Marketing Plan for cluster product

2014/15 Q3-Q4: Implementation of the business plan.

2014/15 Q4: Facilitate acquisition of resources for the functioning of the cluster.

Lead departments/ departments: the dti, EDD, Industry, Provincial Departments of Economic Development.

Biofuels

Key Action Programmes

1. Accelerated development in the biofuels sector

Nature of the intervention

This intervention will facilitate the production of biofuels feedstock in seed production for soybean and sorghum. It will further the development of the biofuels industry by leveraging the Regulations on Mandatory Blending of Biofuels with Petrol and Diesel which is due to come into operation from the 1st October 2015.

Economic rationale

The global economic crisis and the resultant reduction in oil prices have combined to reduce the commercial viability of some types of investment in the sector and, more generally have negatively affected investor sentiment. The biofuels sector has strong linkages to agriculture, manufacturing and distribution and has the potential to create substantial numbers of labour-intensive jobs in the agriculture sector in particular.

Outcome

Accelerated investment in the biofuels and upstream agricultural sectors.

Key milestones

2014/15 Q1: **the dti**, with Grain SA, to support the increase in the capacity of biofuels feedstock in seed production for Soy bean and Sorghum.

2014/15 Q2: **the dti,** with Grain SA, to increase research capacity into the development of suitable cultivars in the biofuels feedstock in SA.

2014/15 Q3: **the dti**, with DAFF, to link small-holder farmers to markets via a supplier development programme and sign take-off agreements with industry players in the biofuels industry in time for the arrival of mandatory blending in 2015.

2014/15 Q4: **the dti** and DoE to host an industry stakeholder seminar on Biofuels.

Lead departments/agencies: the dti

Supporting departments/agencies: DoE**, EDD, IDC,** DAFF and Grain SA.

Plastics, pharmaceuticals, chemicals and cosmetics

Plastics

The South African plastics market is well developed throughout the plastics value chain and caters to both local demand and export markets. It is a growing market. Generally, the leading markets for plastics are in packaging, building, construction and the automotive industries. However, other industries which use some form of plastic include agriculture, textiles and electrical, electronic and mechanical engineering.

These industries have been experiencing a profound downturn in demand, as they struggle to adjust to changes in the market for their products and against a rising tide of imports. Competition from advanced developing countries is having an impact on patterns of domestic demand, with cheap imports of relatively low added-value products causing many parts of the world's plastics industry to restructure or collapse. As a result, a number of companies have relocated their manufacturing facilities to low-cost production countries and have themselves become importers. The rising cost of the polymers used by the plastics conversion industry has made many of its customers resist the inevitable price increases that follow and led them to seek alternative sources of supply wherever possible.

Plastics manufacturing in South Africa contributed approximately 0.5% to GDP and 3.2% to the manufacturing sector in 2012. The export value of plastic products in 2012 was R13.1bn compared to an import value of R20.2bn, leading to a trade deficit of R7.1bn. The industry's contribution to the economy is nevertheless significant, and also expressive of increasingly innovative connections with the green economy. With increased investment and technological know-how, the plastics industry in South Africa is in principle capable of undergoing a major diversification from basic to more sophisticated products.

Plastic consumption for 2012 in South Africa was 1,628 million tonnes, which indicates a per capita consumption of 28kg. Included in the consumption figure is recycled plastic, which contributed 264,758 tonnes of recycled input material in 2012 - a 7.8% increase compared to 2011.

The compound annual growth rate (CAGR) for the plastic industry over the next 5 years is expected to be 4.8%, as against the 2012 growth rate of 5.4%. This reduced, but still modestly positive CAGR can mainly be attributed to an expected increase in demand for packaged food and an expected rise in the use of plastics in the automotive industry.

There are approximately 2,000 companies in the plastic converting industry, employing 60, 959 workers - each of whom, on average, converts approximately 25 tonnes annually.

Sector economic data

Variable	Contribution in 2012
Manufacturing value-add	R50bn
Manufacturing employment	60,959
Trade balance	-R7.1bn

Constraints

Key barriers to growth in the plastics sector are:

- Import parity pricing of polymers and other key inputs;
- Pricing of raw materials;
- Electricity pricing;
- The slow pace of technological upgrading;
- Strong competition from imports;
- (Non-) proximity to markets (and related high logistics costs);
- The relatively small size of local and regional markets;
- Enterprise scale: plastics conversion plants are generally small to medium-sized, with an average size of 130 employees. Many plants have fewer than 50 employees, and those with 400 and more employees are generally considered to be large.
- Endemic skills shortages: plastics engineers (beyond first degree) are not being produced in sufficient quantity to support the growth rate the industry needs. Similarly, at an operations level, mould-setters and plant operators with the required new competencies associated with rapid innovation and technological development are in very short supply. The same applies to the availability of trained and experienced artisans in the sector.

All of these challenges need to be seriously addressed in order to create stronger prospects for the growth of the domestic plastics market.

Key Opportunities

Key areas of opportunity for growing sector include:

- Automotive interior and exterior products;
- Food packaging;
- Medical products;
- Buildings- pipes, flooring and building sheets;
- Electrical and electronics cables, appliances and casing components.

Key Action Programmes

1. Development of plastic production and innovation cluster

Nature of the intervention

Cluster development in the plastics sector to deal with testing, R&D and skills.

Economic rationale

Plastics conversion plants are generally small to medium-sized, family owned businesses with no or limited R&D activities, testing facilities and skills deficits. The intervention will enable converters to develop economies of scale based on shared infrastructure, equipment and knowledge, thereby strengthening capacity to access existing and new markets. Cluster development will assist unemployed learners to participate in accredited work programmes and acquire skills, while enhanced R&D will transform the training division into a value added, high performance strategic partner to the industry.

Outcome

Sustainable plastic cluster with access to markets.

Key milestones

2014/15 Q1-Q2: **the dti** to facilitate establishment of the cluster management structure.

2014/15 Q3: **the dti** to facilitate the acquisition of operational resources for the cluster through the MCEP.

Lead departments/agencies: the dti, Plastic SA

Supporting departments/agencies: DST, CSIR

2. Plastics trade policy measures

Nature of the intervention

Encourage and support local production of components to help the sector compete effectively and sustainably in global markets. The regulatory intervention on 'incorrect coding' is aimed at clamping down on illegal imports that have up to now been massively penetrating the country.

Economic rationale

The sector lags behind its international competitors in terms of conversion efficiencies and other key indicators of world class manufacturing practice – namely, consistent high quality, competitive cost and timely delivery. At the same time, plastic companies face a severe threat from cheap and/or illegal imports. The elimination of illegal imports will therefore represent an important step in levelling the playing field for local manufactures.

In addition, the project will boost revenue figures, replace imports and provide new export opportunities. Through the use of technologies such as blow and injection moulding, capital expenditure is expected to increase and new manufacturing jobs will be created.

Outcome

Improved support for local manufacturing and boost competitiveness of the plastic sector.

Key milestones

2014/15 Q2-Q3: Conduct an awareness campaign amongst plastic manufacturers in all provinces to bring them up to speed on available **dti** support measures and the structure of import duties related to intermediate and finished products.

Pharmaceuticals and medical devices

Healthcare

In 2012, South Africa spent 8.5% of its GDP on health-care, split roughly 50:50 between the private sector (providing care for 8 million South Africans with private medical insurance) and the public sector (providing care to the remaining 42 million people). While overall spending as a percentage of GDP is comparable to most EU countries, it conceals the huge disparities between private and public sector spending per capita (R11,150 vs. R2,766). The National Health Insurance programme, which aims to create a single healthcare system over 12 years (2012 to 2025), will greatly increase demand for quality health facilities, medicines and medical devices.

It is of paramount importance that the policies of the relevant departments – and particularly those of the National Health Department (DoH) and **the dti** - are fully harmonized and co-ordinated to transform this growing economic burden into an opportunity for the SA economy.

The medical products sector

The South African medical products sector - comprising pharmaceuticals, medical devices and medical diagnostics - is estimated at US$6.5 to 7 billion at ex-factory price levels (approx. R55 billion in 2012). The medical products sector is the 5th largest contributor to South Africa's trade deficit, with imports comprising 65% of the domestic pharmaceutical market, 90% to 95% of the medical devices and close to 100% of the medical diagnostics market.

Pharmaceuticals

The South African pharmaceutical sector at the ex-factory price level was US$ 4.0 billion (R 36 billion) in 2012 – or just 0.4% of the global pharmaceutical market by value. South Africa's pharmaceutical market and industry are, however, by far the largest in Africa. South Africa also has the world's largest ARV programme, providing treatment to 2.2 million people in the public health sector and 150,000 in the private sectors (as at December 2013). The number of people on ART is expected to plateau at 3.7 million in 2017.

The domestic manufacturing profile is skewed, "bottom-heavy", with technologically advanced yet often under-utilised formulation capacities (including the multi-core "3 in 1" fixed-dosage ARV tablets) and disproportionately smaller active pharmaceutical ingredients (API) manufacturing.

Domestic manufacture of vaccines, which ceased in 1999/2000, has not yet been re-established despite considerable assistance from Government. The manufacture of biological medicines is also struggling to attract investment and advanced technologies.

Sector economic data

The South African Pharmaceutical Sector – essential statistics		
Variable		**Contribution in 2012**
Market size (at ex-Factory prices)	Total	R 36 billion (US$ 4.0 billion)
	Private (insurance & out-of-pocket)	R 23.5 billion (65%)
	Public (Government)	R 12.5 billion (35%)
Import penetration		55% (65% including APIs)
Number of domestic manufacturers		23
Manufacturing value-add		Varying from 95% to < 15%; weighted aver. 50%
Employment	Industry	9,500
	Downstream (logistics & pharmacies)	25,000
Trade balance (TH Chapter 30, excl. APIs)		**R -17.8 billion** (imports R 19.4 Bn, exports R 1.6 Bn)
		Main contributors: Medicines in finished-dosage form (TH 30.04) – 78.5%; biologics & vaccines (TH 30.02) – 13.5%; "medical textiles" (TH 30.05) – 2%. Origin of imports: India (R 2.42 Bn); Germany (R 1.86 Bn); Italy (R 1.36 Bn); UK (R 1.3 Bn); USA (R 1.3 Bn); France (R 1.25 Bn); Switzerland (R 780 million).

Key challenges

- The SA pharmaceutical industry was decimated between 1998 and 2005, losing 37 manufacturing plants and 6,500 jobs, chiefly as a result of global trends (consolidation, mergers and acquisitions). Job losses in some segments, most notably medical textiles (bandages, wound dressings, plasters etc.) have reached 70%, despite a degree of protection by import duties.
- The pharmaceutical industry revival programme, assisted by **dti** incentives (tax allowance of R813 million awarded under the SIP programme between 2003 and 2008) brought mixed results. Aspen-Pharmacare became the world's 8th largest generic pharmaceutical manufacturer in 2012, but an increasing proportion of its revenue comes from (and investment goes to) foreign markets. South Africa's second largest pharmaceutical company, Adcock-Ingram, has been experiencing serious financial difficulties, running some of its plants at below cost-recovery level - chiefly due to the loss of both key state tenders and private market share. As a result, it has been unable to recover the R2.5 billion it invested in plant upgrading between 2008 and 2012.
- According to the industry, the main challenges affecting its financial performance and dampening investment appetite are: (i) the impact of price controls on medicines, (ii) regulatory delays – poor performance of the Medicines Control Council (MCC); and (iii) the new preferential procurement regulations that took away the (already minuscule, vis-à-vis countries such as Brazil) preference points for local contents.
- The effects of the recent Intellectual Property Bill are difficult to predict – these may include reduced future presence of large innovative pharmaceutical companies (US and European multi-nationals); but also perhaps stimulation and acceleration of technology transfer and substitution of imported branded products by SA-made generics.
- Medical devices: The medical devices sub-sector is made up of a wide range of basic products including instruments (disposable syringes and scalpel blades); wheelchairs; specialised furniture (hospital beds, dentists' chairs, operating tables etc.) and surgical implants and stents. At the more sophisticated end of the spectrum lies electronic monitoring and diagnostics equipment, including complex and expensive items such as NMR (nuclear magnetic resonance) and PET (positron emission tomography) scanners.

Medical devices also include in-vitro laboratory diagnostics used to detect infection (seroconversion) and monitor progress in the treatment of patients suffering from infectious and non-communicable diseases.

- Domestic production of medical devices supplies less than 10% of the market and is predominantly limited to surgical implants, stents etc. Nevertheless, striking pockets of local innovation capability have been shown to exist – most notably the recent development of the Lodox full-body scanner featured in an episode of the US television series *Grey's Anatomy*. South Africa has also become the world's leading manufacturer and exporter of isotopes for medical diagnostics.

The major employers in the sector are laboratory diagnostics services. In this area, there is significant unrealised potential to create well-paid jobs in servicing the imported diagnostic equipment.

Key opportunities – pharmaceuticals

- Meeting fast-growing public sector demand for pharmaceuticals, especially (i) ARVs (demand projected to increase from the current 2.2 million to 3.7 million patients in 2016-2017); (ii) anti-TB medicines; and (iii) medicines for non-communicable diseases/conditions such as diabetes, cancer, circulatory and cardiovascular conditions etc.
- Manufacturing generic copies of medicines losing patent protection in 2014-2015 for supply into the SA public and private health sectors.

Key constraints – pharmaceuticals

- Almost total reliance on imports of active pharmaceutical ingredients (APIs), including ARV APIs, affecting the DoH's readiness to increase the allocation of tenders/contracts to SA manufacturers due to concerns about security of supply.
- The virtual absence of domestic manufacturing capability in fine chemicals (intermediates for API synthesis) has the effect of reducing the future competitiveness of the domestic API industry and necessitating continuing interim financial support from government.
- Limited ability of the National Treasury to provide the necessary financial support for the nascent domestic API industry.
- Lack of private sector interest in investing in local API manufacture, mainly due to fierce competition from low-cost Indian and Chinese imports.
- Non-existing local expertise in the manufacture of biological medicines and vaccines.
- Delayed entry of new medicines (including the commercially attractive newly off-patent generic medicines) due to regulatory delays.

Key opportunities and constraints – medical devices

These will be identified through a study of the SA medical devices sector (started in November 2013 and due to be completed before mid-2014).

Key Action Programmes

1. Development of strategy for the medical devices sector

Nature of the intervention

The dti, in cooperation with the relevant stakeholders (the SA medical device sector, the National Health Department and the SA Medical Research Council) will develop a comprehensive Medical Devices Sector Strategy, This will be a multi-faceted intervention, focussed on: stimulating growth in the domestic industry; reducing the sector's trade deficit; rationalising imports; creating jobs in manufacturing and maintenance/specialised services; using the instrument of tender designation to facilitate SA manufacturers' access to both domestic and export markets; and, finally, easing existing regulatory barriers.

Economic rationale

South Africa imports 90% to 95% of the medical devices in use in the health sector, and 100% of medical diagnostics equipment, costing the country between R25 and 30 billion (US$ 2.5 to 3 billion) per annum. A large proportion of the goods imported are inadequately supported by the necessary technical back-up, which results in frequent down-time, resource wastage and redundancies. Concurrently, the absence of an internationally-recognised South African Medical Devices Certification Authority impedes South African exports.

Outcomes

Unlocking the potential in domestic manufacture and servicing of imported medical devices; reducing the sector's trade deficit; creating quality jobs in manufacturing and maintenance; reducing the wastage of funds in procurement of inefficient or sub-standard medical devices.

Key milestones:

2014/15 Q1: Completing the study of the SA medical devices sector.

2014/15 Q1: The study presented to a broad stakeholder forum.

2014/15 Q2: Draft strategy for the medical devices sector completed, presented to (i) the Ministerial cluster and (ii) the private health sector stakeholders.

2014/15 Q3: Final strategy completed, presented as a Cabinet Memorandum.

Lead departments / agencies: **the dti**.

Supporting departments/agencies: DoH, MCC, DST, EDD, National Treasury, Medical Research Council (MRC) and SABS.

2. Designation of pharmaceutical tenders in the 2014-2015 tender cycle

Nature of the intervention

Designation of selected pharmaceutical tenders and individual products, following a thorough analysis of public sector needs vis-à-vis the capabilities of the domestic industry (installed capacity, product registration, and access to the primary and secondary/back-up sources of Active Pharmaceutical Ingredients).

Economic rationale

An increasing proportion of medicines procured by the Department of Health are imported, while domestic manufacturing capacity remains underdeveloped.

Outcomes

Increasing the utilisation of domestic manufacturing capacity without affecting security of supply; improving investor confidence in the local pharmaceutical sector.

Key milestones

2014/15 Q1: Analysis of the performance of suppliers in the 2012 - 2013 tender cycle; lessons from the designated tenders; analysis of the DoH's procurement programme for 2014-2015 vis-à-vis the capabilities of the domestic industry.

2014/15 Q1: Update of **dti**'s position document on the designation of pharmaceuticals, including a new cost-benefit analysis.

2014/15 Q1: Tender designation framework for 2014-2015 agreed upon with industry and the DoH.

2014/15 Q1-Q2: Submission to the Minister requesting designation of specific pharmaceutical tenders and products in the 2014-2015 tender cycle.

2014 - 2015: Monitoring of the performance of suppliers in the designated tenders: on-going throughout.

Lead departments / agencies: **the dti**.

Supporting departments/agencies: The DoH and National Treasury.

3. Facilitation of Project Ketlaphela

Project summary

Project Ketlaphela aims to establish domestic manufacture of ARV APIs supplying 40% of South Africa's projected peak demand for ARVs in 2016-2017. Ketlaphela will be a state-controlled enterprise (the State controlling 60% via the IDC and Pelchem), jointly operated with a private investor and technology provider.

Ketlaphela will provide 500 tons of ARV APIs, adequate to formulate 500 million tablets per year of the once-a-day "3 in 1" fixed-dosage ARV combination which is the basis of 1st line ART. This amounts to 40% of the projected peak demand for ARVs in 2016-2017. The capital cost of the project is R2 billion (140 million Euro) and the operational capital needed is R1 billion.

As reported to Cabinet, in order to be viable, the project requires (apart from **the dti**'s generic incentives) a capital grant of R600 million and additional operational support – a production rebate of 10% for the first seven years of operation - totalling R 1.7 billion (R245 million) per annum. Subsequently, the project would then be expected to become economically sustainable without further operational support.

Following the withdrawal of the initial foreign investment partner and technology provider (the Swiss company Lonza) in March 2013, government published a Request for Expression of Interest in May 2013. Four bidders were short-listed in October by the inter-departmental task team and the evaluation process is currently under way.

Nature of the intervention

The dti, as a member of an inter-departmental Ketlaphela Task Team will continually re-assess the project's strategic and economic rationale while providing the necessary technical, financial and legal support.

Economic rationale:

The rationale of Project Ketlaphela is more strategic than economic. However, by improving the security of supply of ARVs and averting treatment interruptions, the project will help to slow-down the drift from the low-cost 1st line ART to the expensive 2nd line.

Outcomes

Reduced reliance on imports of APIs will improve the security of supply of ARVs.

Key milestones

2014/15 Q1: Selection of the preferred bidder, negotiations and signing of contract.

2014-2015: Commencement of project (detailed design, followed by construction).

2017/18 Q1: Commissioning of the project and start of production (1st ARV API)

Lead departments/agencies: DST, dti

Supporting departments / agencies: DoH, NT, EDD, IDC, Pelchem and the CSIR.

Cosmetics sector

The South African cosmetic and personal care industry is widely regarded as vibrant and dynamic. It comprises an interesting mix of multinational giants, small, medium and large local brand owners and small entrepreneurial companies. The industry is self-regulated, generally subscribes to high quality standards and is well placed to make its mark in the international arena.

Beauty and personal care achieved double digit growth in 2010 (*Euromonitor 2011*). There is an increasing presence of local companies within South African beauty and personal care, even though the sector is still dominated by the major global players. Leading departmental retail stores in South Africa are increasing their ranges of premium skin care, colour cosmetics and fragrances in order to expand product reach. SMMEs, however, are still finding it difficult to access shelf space in local retail stores, with the result that their products struggle to make a breakthrough into consumer consciousness.

Although the global cosmetics industry was affected by the recession of 2008-09, by 2011 it appeared to be moving into modest recovery, in line with global economic trends.

The sector's main challenges are maintaining good quality at viable price levels whilst coping with sharp rises in raw material costs and packaging expenses.

Sector economic data

Variable	Contribution in 2012
Manufacturing value-add	1%
Manufacturing employment	50,000
Trade balance	-R555 million

Key opportunities

- Maintaining growth in the cosmetics sector is not easy, but is possible – particularly if SMMEs receive the support they need from contract manufacturers.
- Marketing locally produced cosmetics products in the provinces is a huge challenge. In order to promote 'the buy local concept', the sector desk will continue engaging with industry through provincial workshops allowing companies opportunities to network and showcase their products. Key stakeholders include the IDC, SEDA, SEFA, CECOSA, CTFA and incubations institutions.
- Since the cosmetics industry is self-regulatory, companies need to produce good quality compliant products. South Africa has a number of privately owned laboratories and university institutions that are already testing cosmetics products in order to ensure compliance with both local and international standards.
- As a remedy for the absence of a dedicated and accredited local Cosmetics Safety Assessment Course, t**he dti** is working together with the industry to develop just such a course.

Key constraints

- Skill shortages (especially toxicologists) are required to do safety tests for export opportunities.
- Import duties on raw materials are high, making product pricing less competitive than it could and should be.
- There is as yet no sector-specific incentive scheme in place.

Key Action Programmes

1. Development of the cosmetics sector strategy

Nature of the intervention

Together with the relevant stakeholders, t**he dti** will develop the Cosmetic Sector Strategy in order to stimulate growth, improve local company performance, create jobs and enhance access to both local and export markets in Africa and other regions.

Economic rationale

The strategy seeks to alleviate constraints experienced by cosmetic companies in South Africa and encourage expansion and growth in the cosmetic manufacturing sector**.**

Outcomes

Accelerated growth in the cosmetics sector, creating jobs and increasing skills levels.

Key milestones

2014-2015: Develop & implement a Key Action Plan as informed by recommendations from the Sector Strategy.

Lead departments/agencies: dti

Supporting departments/agencies: DST, CTFA, Chemin, CECOSA, Tshumisano, Chemcity, EgoliBio.

2. Cosmetics Products Safety Assessment

Nature of the intervention

In the absence of an accredited Cosmetics Safety Assessment Course, South Africa is currently unable to train the required number of scientists to become recognised safety assessors. In partnership with the Toxicology Association of South Africa (TOXA) and DST, therefore, **the dti** is in the process of developing a two year safety assessment course that will include a learnership programme. At the same time (in partnership with the University of Cape Town) the sector desk is facilitating the establishment of a Hair Testing and Cosmetics Testing Laboratory. This laboratory will focus on new product development, testing of hair care products and cosmetics products that are both imported and locally manufactured. Training will be offered at MSc and PhD level.

Economic rationale

To create an internationally-recognised database of locally trained and registered cosmetics toxicologists capable of routine, day-to-day testing and certification of cosmetic products, which will then become much more readily acceptable globally. This will reduce the exorbitant costs currently incurred by companies that are at present compelled to test their products overseas.

The UCT Laboratory will offer both toxicology testing and hair product claims validation (both of which are essential for the export market).

Outcomes

Cosmetics products produced in SA will be tested and certified locally by SA toxicologists to meet EU safety standards and thereby grow the sector's export base.

Key milestones

2014/2015: Work with University of Pretoria, TOXSA and DST to develop the two-year Safety Assessment Course; establish the Hair Testing and Cosmetics Testing Laboratory at UCT.

2015-2017: Two-year Safety Assessment Course commences, targeted at 75% South Africans and 25% from other African countries

Lead departments/agencies: dti

Supporting departments/agencies: DST, TOXA, University institutions, CHIETA.

Business Process Services

Sector profile

The Business Process Services industry involves contracting a third party to perform a company's necessary but non-core processes in place of an internal source. Off-shoring describes the relocation of such business processes (like operations, support processes including accounting and customer service as well as back office processes) to other countries, particularly in global production networks. Off-shoring is thus not only about foreign inputs being serviced domestically, but also about cross-country collaboration.

South Africa has energetically taken hold of the growing off-shoring opportunities on offer, successfully leveraging such in-country attributes as appropriate infrastructure, narrow time zone differential (especially with regard to EU countries) and suitable skills (in terms of cultural compatibilities, language and diction capabilities.

In 2006, South Africa's BPS industry was almost non-existent with only a window of opportunity having been identified and a new ambitious strategy in place. While there was some outsourcing, there was very little off-shoring and no local firms were servicing overseas clients. By 2010, following concerted government and industry efforts in implementing the strategy, Gartner, a top global BPO research firm, identified South Africa as one of the top 30 countries for offshore services. South Africa was named in the EMEA category together with Bulgaria, the Czech Republic, Egypt, Hungary, Mauritius, Morocco, Poland, Romania, Russia, Slovakia, Turkey and Ukraine. After winning the Offshoring Destination of the Year award from the UK National Outsourcing Association (NOA) in 2012, South Africa received the same accolade from the European Outsourcing Association (EOA) in 2013.

In 2012, the London School of Economics developed a matrix framework on how to assess the attractiveness of locations for Business Process Offshoring. (See Figure 30 below). Using this instrument, it then conducted an opinion survey of thirty senior global sourcing analysts working in client, provider, management consultancy, market analysis, and research organisations. Ten direct competitor countries were assessed: namely India, the Philippines, South Africa, Poland, Morocco, Malaysia, Kenya, Sri Lanka, Egypt and Northern Ireland.

Figure 30: LSE Location Attractiveness Framework (2012)

Cost	Skills availability	Environment	Infrastructure	Risk profile	Market potential
Labour	Skills pool [competency]	Government support	ICT infrastructure	Security	Local markets
Quality of infrastructure		Business	Real Estate (Office space)	Disruptive events	Nearby markets
Taxes and Incentives	Providers landscape	Quality of life	Transport	Macro-economic outlook	
		Accessibility	Power/Energy reliability	Regulatory framework	
				Intellectual Property rights	

Source: Outsourcing Unit: London School of Economics

The most significant finding of the survey was that there was only minor variation among the top six ranked countries, namely - 1) India, 2) the Philippines, 3) Poland, 4) South Africa, 5) Northern Ireland, and 6) Malaysia - whose overall rating was described as "good"; whereas Morocco, Sri Lanka, Egypt, and Kenya were collectively rated as "meeting minimum requirements".

The dti's Business Process Services programmes continue to aim at growing investments that service the off-shore market, increasing employment, particularly youth employment, increasing the domestic market's capacity to service the off-shore market and increasing South Africa's market share as a global destination for off-shored business process services. To date the South African Business Process Services incentive has grown to support approximately 16,000 jobs with an estimated investment of R 1, 65bn; largely attributable to the introduction of a BPO & O incentive between 2007 and 2010, and the shift from BPO & O to BPS in 2011.

On the skills side, by the end of the 2013/14 financial year the partnership created in 2008 between the industry and government (National Skills Fund, Jobs Fund and **the dti**) had resulted in a robust domestic BPS platform which is increasingly able to capture foreign contracts. The end of the 2013/14 financial year also saw the milestone being reached of 10,000 unemployed youth completing the training programme; some 7,500 of whom subsequently found gainful employment in BPS sector. The industry at large, including the domestic component, has grown to more than 200,000 agents and 30,000 support staff. The estimated growth rate is 8% per annum and the industry as a whole was valued at approximately $150 billion in 2012.

Sector economic data

Variable	Contribution 2007- 2010 (BPO&O)	Contribution 2011- 2013 (BPS)	Total contribution
Employment resulting from BPO&O and BPS incentives	7,295	7,738	15,033
Unemployed youth trained under MWRP	4,467	6,320	10,787
Employment from MWRP	3,483	4,268	7,751
Foreign direct investment	R349m	R1,3bn	R1.65 bn

Source: Markets

The value proposition for South Africa as a key off-shoring destination is anchored on its ability to offer English-speaking talent at a scale, a robust enabling environment, deep domain skills advantages, significant cost savings and a first world experience for those who set up operations. Not surprisingly, therefore, South Africa remains the preferred destination of the English speaking markets, with the UK still commanding the largest share as a source market. 60% of off-shore operations located in South Africa are either UK captive operations or third-party operations servicing UK clients from South Africa.

More broadly, the package of services delivered for international customers includes telecoms, online shopping, finance and accounting, legal process services, insurance and media.

Key opportunities

Some notions still remain that the industry is solely comprised of call centres; but it has in fact become much more diversified, offering back-office hubs, knowledge process outsourcing, legal process outsourcing, software design and engineering, animation, game development and transcription services. These sub-sectors are still relatively small in terms of number of companies and employees; but they are showing steady growth, and if properly supported have the potential to create significant long term, sustainable employment opportunities. At the same time an important window of opportunity exists for the South African BPS industry to catch the wave of African continental growth in the area of Shared Services operations.

Key opportunities

Legal Process Outsourcing

Legal Process Outsourcing is a process where legal support services from either an external law firm or a legal support services firm are used (either directly or indirectly through an intermediary) to perform agreed legal support services. Recently some multinational corporations (mostly from the UK) have outsourced certain legal support functions to Northern Ireland and Australia. The preference for Northern Ireland as a destination for outsourced legal support functions is evidently attributed to the new incentive offerings in that country, while Australia is perceived as a strong alternative location due to its perceived cost-effectiveness and cultural fit. In South Africa there are pockets of successful off-shored legal functions deriving in the main from the shared Commonwealth countries legal framework that is in place.

The key determinants that influence decisions on off-shoring legal support functions are: availability of the requisite legal skills pool (number of qualified lawyers, paralegals and law graduates); property costs (office units and accommodation); and infrastructure (IT, communications costs, availability of fibre optic communication backbones). Important emerging considerations are the international trend toward ITO/BPO integration and the increased use of cloud computing by big corporations.

The dti, working in close cooperation with the Law Society of South Africa, has identified important niche area opportunities in source markets such as Australia and the UK. The Law Society has now partnered with other industry players and submitted an application for the establishment of an LPO Joint Action Group. In parallel, **the dti** has embarked on a drive to research this sub sector's long term potential for sustainable job opportunities.

Africa the next growth frontier for off-shore services

Over the coming decade, near-shore outsourcing from companies in the rest of Africa will drive the overall size of the South African BPO market. With the rise of the African continent as an increasingly compelling global trade and investment destination, more and more multinational providers will strive to extend their footprint across Africa, bringing with them their business expertise and maturity and at the same time opening up new off-shoring opportunities for local niche service providers. Large firms will typically opt to centralise business processes in one location, servicing multiple operations across the continent from that single near-shore base. South Africa has grasped this logic and is already home to nearly half of the top 40 African-owned companies with established global operations in the finance and accounting, telecoms, logistics, procurement and banking industries. With the largest economy and best regulated business environment on the African continent – and with a strong telecommunications and IT skills pool - South Africa stands the best chance of hosting these shared services centres.

From its own home base South Africa has made some - but still insufficient - inroads into the African continent, providing BPS services for global and domestic firms expanding across Africa. In principle, the attributes outlined above should put South Africa in pole position to provide both basic and KPO services to the rest of the region on an extended scale - particularly in the context of emergent regional shared services operations.

Capturing new English speaking markets

South Africa is among the Top 3 global locations that can support English language skills at scale with a sufficient BPS industry-addressable workforce added annually across educational streams. The large talent pool means the country is well poised to service international markets. While good headway has been made into the UK over the last few years, other English speaking markets to be explored in countries like Australia – where a few successful contracts are already being managed from South Africa.

Constraints

- A continuing shortage of appropriately skilled talent - especially middle and senior management personnel with the requisite industry-specific skills – and hence continuing over-reliance on imported expats.
- A fragmented approach to industry mobilisation by industry associations.
- An incentive-dependent industry culture which undermines its long term stability.
- Obsolete industry standards in a number of areas.
- Insufficiently developed market access for South African businesses to service the offshore market, leading to the outflow of revenue back to the source countries.
- A generally weak international economic environment and the persistent uncertainty created by continuing global recession.

Key Action Programmes

1. Implementation of the Business Process Services (BPS) incentive programme

Nature of the intervention

Ongoing implementation of the BPS incentive programme.

Economic rationale

For BPS investors, the cost of operating is one of the critical areas of consideration for an investment decision. The rationale behind this initiative is to counteract high operational costs in certain business areas and profile South Africa as an attractive BPS destination that can match and exceed the offerings of other key competitor countries. **The dti** has revised its capital expenditure-based BPO & O incentive programme, replacing it with the BPS incentive under which investors can offset against any operational expenditure. It is expected that as South Africa becomes more clearly competitive as a destination, more investment will necessarily flow in and more jobs will be created.

Outcomes

An additional 10,000 off-shore jobs leveraged by March 2015 through provision of incentives to the value of approximately R600 million.

Key milestones

2014/15 Q1: Launch of the new BPS incentive guidelines.

2014/15 Q1-Q4: Ongoing implementation of the BPS incentive

Lead departments/agencies: the dti

Supporting departments/agencies: National Treasury

2. Talent development for the BPS sector

Nature of the intervention

The Monyetla Work-Readiness Programme™ is a dedicated sector-specific, demand driven work readiness programme which bridges the divide between unemployment and the opportunity for sustainable employment. It provides the industry with requisite skills from entry level to supervisory levels in order to position South Africa as a preferred off-shore location for BPS operations.

At inception, the Programme was offered at NQF level 2. From 2013 onwards it has been offered at two additional levels - NQF level 3 (which targets entry level agents) and NQF level 4 and above (which seeks to address the shortage of higher level skills). With some adaptation, this programme could be replicated in other growth sectors with similar results.

Economic rationale

One of the major determinants for investors wishing to start BPS operations is the availability of appropriately skilled labour in the location under consideration. In addition, having a readily available pool of labour would ensure that young unemployed people in South Africa are trained and capable of absorption into other areas of work.

Outcomes

- A readily available pool of labour for investors to draw upon.
- Improved career-pathing across the industry, providing scope for increasing the proportion of local middle and senior managers.

Key milestones

2014/15 Q2-Q4: Training of 3,000 unemployed youth at NQF Level 3.

2014/15 Q3: Training of 500 supervisors, team leaders and provision of other industry-specific skills.

2014/15 Q4: Minimum of 11% targeted for tier 2 and tier 3 towns, townships and rural areas is achieved.

2014/15 Q4: 70% of trained learners contracted into employment for a minimum 12 month contract.

Lead departments/agencies: DHET, **the dti**

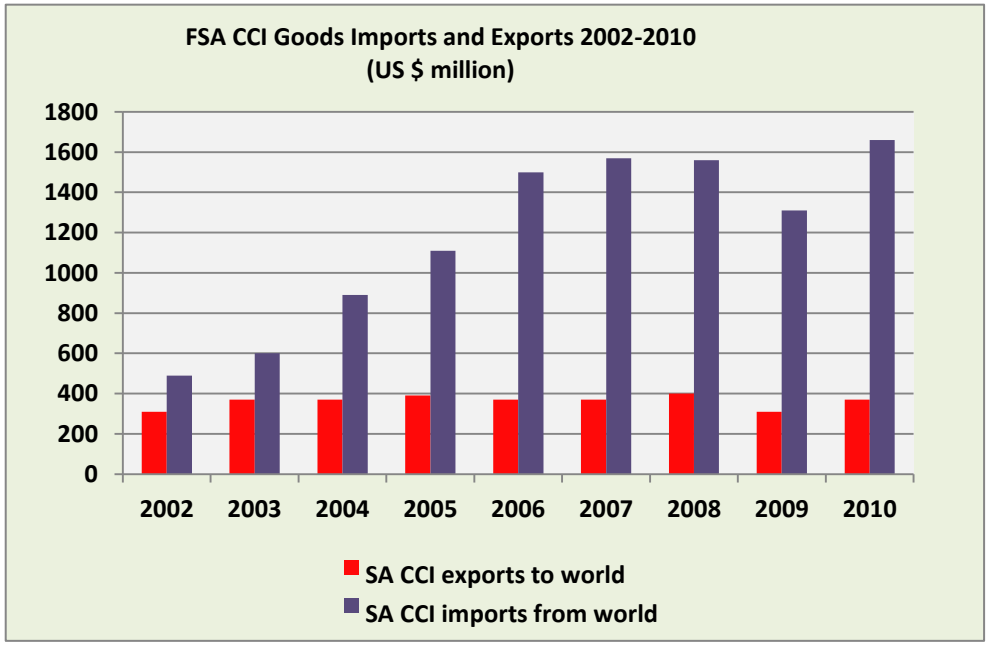
Supporting departments/agencies: Accredited training institutions, Contact Centre Management Group, Business Process enabling South Africa, employers in the BPS sector.

Cultural and creative industries

The creative industries hold great potential for developing countries that seek to diversify their economies and leapfrog into one of the most dynamic sectors of the world economy. South Africa has long identified the potential of the Cultural and Creative Industries (CCI) to contribute to both economic and social development as evidenced in CIGS, ASGISSA, NIPF, NDP and the IPAP.

However, the South African creative economy has long been dominated by imports. This has a direct impact on the ability of the local creative industry to create, support and sustain local manufacturing, services and the jobs they create. Over the period 2002-2010, South Africa's total CCI goods trade with the rest of the world remained relatively constant, while imports rose considerably. (Fig. 31)

Figure 31: CCI imports and exports

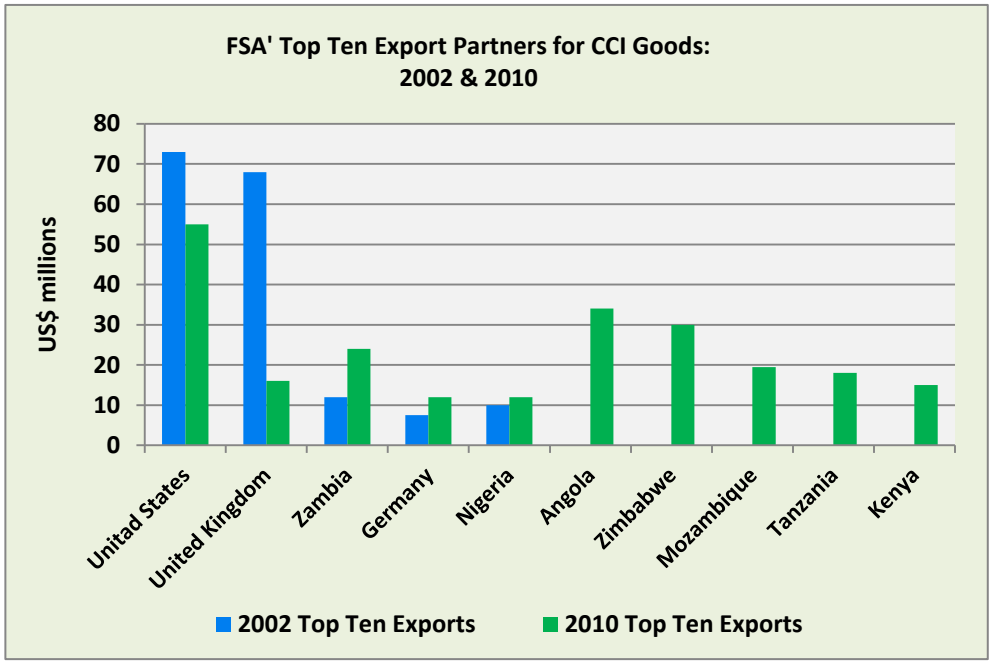


Source: UNCTAD

South Africa's top export and import partners

There has also been a distinct change in the profile of South Africa's major export partners over the 2002-2010 period, with African countries particularly coming to the fore and developed economies - including the USA, UK, France, Australia and Germany - falling away. (See Figure 32 below).

Figure 32: SA 'Top-ten' CCI export partners



Source: UNCTAD

While there is clear evidence of robust demand for creative and cultural goods and services in South Africa, supply continues to be dominated by imports. There is thus an urgent need for a key strategic developmental focus on the South African CCI sector, prioritising interventions that promote the growth of domestic demand and matching supply capabilities.

The focus on domestic demand, local production and consumption must not of course be pursued at the expense of export development; but it should serve as the necessary springboard for export growth.

Sub-sector Focus: Music

The South African music industry is one of the most developed music industries in Africa and indeed compares reasonably well with other strong music industries in Asia, Latin America and Eastern Europe. The local music industry has continued to show growth despite the global recession and the continuous growth of piracy and decline in physical sales.

In 2012, South Africa accounted for approximately 0.52% of the international recorded music sales market, to a value of R698 million. In parallel, the South African live music industry was estimated to be worth R928 million in consumer spending on concert and festival ticket sales, merchandise, food and sponsorships. South Africa also boasts a strong industrial base in recording, manufacture, retail and broadcasting.

On the other hand, manufacturing of music instruments and audio equipment in South Africa remains limited and economically insignificant. Imports of musical instruments have grown in value from $11 million in 2002 to $27 million in 2011, while imports of sound production equipment have grown from $104 to $150 million over the same period.

Key opportunities

The move to digital broadcast and the opening up of more distribution and broadcasting channels will be driving increased demand for creative industries digital content, especially in film and music. Other factors driving increased demand for music, film and digital games will be: rapid growth of online distribution methods; the associated growth in ownership and usage of various forms of digital audio platforms, including online radio, iPod/MP3 players, and mobile phones; and the strong migration of more and more consumers towards the use of legitimate download sites.

Constraints

Although the South African music industry is considered relatively mature and stable, it continues to experience immense pressure from imported music products and services. While a high percentage of all music products distributed in South Africa consists of imported material - thus extending and entrenching the market domination of foreign content - access to finance for investment in local production, distribution, infrastructure and equipment facilities has proven to be difficult, with very few financing vehicles responsive to and dedicated to the music industry.

Key Action Programmes

1. Developing Manufacturing in the Music Industry

Nature of the Intervention

This programme will aim to encourage investment into development of manufacturing across the music value-chain; support partnerships with international musical equipment manufacturers; and support research and development for locally designed and produced music technology, instruments and equipment.

Economic Rationale

Manufacturing in the creative industries especially music and film has been largely neglected in most developing economies. Aside from traditional craft-based production of musical instruments, the manufacturing of almost all musical instruments and equipment is based in the US, Europe and Asia. While South African imports and (re-) exports of musical instruments and equipment are substantial, they do not contribute to local work opportunities since the exports are not of goods that have been manufactured in South Africa.

Outcomes

- Increased investment into local manufacturing of musical instrument and equipment.
- Establishment of a local musical instrument and equipment manufacturing industry for both international and local music industry products.
- Increased employment creation.

Key Milestones

2014/15 Q1: Develop an investment proposition to attract foreign manufacturers to establish local manufacturing plant for musical instruments and audio equipment.

Lead Departments/Agencies: the dti

Supporting Departments /Agencies: CSIR, IDC, SABS.

2. Domestic and international market share development

Nature of Intervention

This programme aims to increase the domestic and international demand and consumption of South African music industry products and services by supporting and incentivising distribution and marketing of music goods and services on all distribution platforms. At the same time it seeks to support and incentivise local and foreign music venues to host and programme regular live music performances, thus creating more regular work opportunities for artists.

Economic Rationale

The global music industry market has shown consistent positive growth over the last few years. In order for South Africa's music industry to remain sustainable there is a clear need to develop strong export markets from which revenue can be generated and foreign currency attracted to bolster the local economic activity of music production.

Outcomes

- Increase in volume of demand and consumption of locally produced Music products and services across all domestic and international distribution and consumption platforms.
- Improved access to domestic and international distribution networks, wholesale and retail platforms and spaces.

Key Milestones

2014/15 Q1-Q2: Develop a comprehensive music marketing and distribution model for both local and international market access to stimulate distribution and grow domestic and international market share for South African music.

2014/15 Q3-Q4: Establish and develop a direct South African presence in key markets, with either foreign representative or SA companies continuously investigating and expanding market opportunities for South African products and services.

2014/15 Q1-Q4: Leverage or amend existing **dti** incentives to better support local and foreign music venues to host regular live music performances, thus creating more regular work opportunities for artists.

Lead Departments/Agencies: the dti, DOC, DAC

Supporting Departments/Agencies: NFVF, IDC, Brand SA

Sub-sector Focus: Film

South Africa is considered unique in that it combines wonderful locations and weather with first world infrastructure and filming facilities. The market for filmed entertainment in South Africa generated revenue of R2.2 billion in 2012, representing a 6.5% year-on-year growth over 2011. South African box-office revenues generated R23 million in the first half of 2013, while the South African TV sector reached a highly impressive value of R27.4 billion in 2012. (PWC: *South African Entertainment and Media Outlook: 2013-2017*).

Key opportunities

Digital terrestrial television (DTT) and further growth of legitimate online TV is expected to drive demand for content not only for television but also for feature film production – the latter, initially at least, likely to be targeted mainly towards cinema and DVD distribution.

The rapid development of new media platforms and the ability of consumers to choose and select content is also creating more demand for differentiated content. With the large number of channels that DTT will afford, more content in indigenous languages will also be in greater demand.

Constraints

The South African film and television market is heavily dominated by imported content. NFVF reported that performance of local films at box office has been generally poor compared to foreign films, which continue to dominate the local exhibition chain and are generally well received by local audiences.

High distribution costs and the profit-sharing formula in place between distributors and the producers have the effect of favouring distributors and generally shifting all the risk to producers. The resultant is that fewer films are made, at higher costs, and the demand for more content is 'automatically' fulfilled by imported films.

Key Action Programme

1. Access to Finance and Infrastructure

Nature of the Intervention

The programme aims to:

- Improve investment and access to capital, funding, production capacity and greater overall business skills;
- Support enterprises to meet technological and infrastructure requirements and strengthen business support mechanisms;
- Promote access to information on how best to access available funds within the industry.

Economic Rationale

Access to working capital, credit and equity is often limited for many companies in the film and television Industry, resulting in a high percentage of survivalist enterprises in the sector. Without investment capacity, the film and television industry will not be able to innovate and adopt digital technologies, let alone gear up its development agenda and re-tool its traditional business model to cope with challenging times.

Although the cost of some production technologies has come down, the cost of producing film is still significantly out of reach, especially for previously disadvantaged emerging film makers. There is significant demand in South Africa for both animation and video games; but at the moment this market remains largely controlled by foreign products.

Outcomes

- Increase in the number of enterprises accessing investment and available financing incentives and packages.
- Increased access to film value chain infrastructure as part of the country's quest to build a thriving film industry with all sections of the film value chain contributing optimally to economic growth and a people-centred information society.
- Increased employment in enterprises that provide technology and infrastructure across the film value chain.

Key Milestones

2014/15 Q1-Q4: Roll out of the revised Film and Television Incentives incorporating the "Emerging Black Film Makers Incentive" category.

2014/15 Q1-Q4: Existing **dti** incentives are leveraged or amended to support infrastructure development for innovative and new converging technologies for the production of digital content.

Lead Departments/Agencies: the dti, DAC

Supporting Departments Agencies: IDC, NFVF, Provincial Film Commissions,

Sub-sector Focus: Craft

Accurate profiling and measurement of the craft sector is the most difficult task within all the creative industries sub-sectors. The challenges range from definitions and delineation of the sector to the informal and unorganised nature of employment and trade.

International trade in art crafts totalled $32 billion in 2008. The global market for art crafts is strong and expanding: over the period 2002-2008 world exports increased by 8.7%, from $17.5 billion to $32 billion. Over the same period, however, South Africa's exports of craft decreased substantially - from R 320 million in 2002 to R 280 million in 2008 - while Imports increased dramatically, from R355 million in 2002 to R1.2 billion in 2010 (*UNCTAD Creative Economy Report 2010*). Key markets for South African craft continue to be the US and the EU, particularly Germany, France and the UK. Chinese imports have spectacularly overtaken the US and EU over the same period, rising from $8 million to $700 million.

Key opportunities

The Crafts and Design sector is characterised by a large number of SMMEs and cooperatives. This profile derives from the sector's relatively low entry barriers for unskilled and semi-skilled job creation, which in turn presents considerable opportunities for workforce expansion.

Demand for craft goods - particularly from the US and the EU – continues to be strong, underpinned by various preferential market access agreements with developing countries. The growth in craft imports into the US and EU has been heavily based on a group of developing/emerging countries - China, India, Thailand, Vietnam, Indonesia, Brazil, Pakistan, Bangladesh – which also includes South Africa.

While it is an unfortunate fact that South Africa's standing in the global craft market has unfortunately diminished over the past decade - with exports declining and imports increasing - opportunities do nevertheless exist to make a return and reconnect with this growth trajectory.

Constraints

Access to markets and distribution channels continues to be a major impediment to the growth of crafters and their enterprises because of the nature and structure of our economy.

The reality is that craft producers (essentially very small manufacturers) are largely excluded from mainstream retail value chains; which in turn reinforces and compounds the general lack of appreciation for local craft products.

Penetration into both local and international markets is limited, and even when a breakthrough has been achieved, the ability of craft enterprises to sustain their presence in these markets tends to be extremely limited because of the difficulties they experience in up-scaling their production and the limited access they enjoy to consistent and predictable market demand. In the face of dramatically increased Asian craft Imports over the past ten years locally handmade crafts have been struggling to compete in the critical middle- to lower-value markets. Access to finance, access to materials, intellectual property rights and protection also continue to hamper the development of the craft sector.

Key Action Programmes

1. Scaling up of handmade and manufactured craft

Nature of the intervention

The aim of this programme is to upscale the roll-out and implementation of the Craft CSP product development interventions to improve design and production capacity. The goal is to strengthen established craft enterprises in the production of Handmade Products by introducing production-line systems and equipment where appropriate, with linkages to national retail platforms. The programme will also introduce manufacturing processes for appropriate craft designs and products to support the scaling up of these businesses and the building of a light manufacturing industry.

Economic rationale

South Africa is in danger of completely losing market share of manufactured craft products to imports. These imports are not only of craft products design and produced by other countries, but also South African-designed craft products that are manufactured outside of the country.

High-end and high quality craft products are consistently able to fetch appropriately high prices in particular markets. The demand for these products continues unabated; but at the same time there is also sufficient untapped potential in the market for affordable middle- to lower-end craft products to justify investment in increased production levels.

Outcomes

- Improved design and production capacity of established and emerging entities.
- Establishment of local streamlined craft manufacturing processes.

Key Milestone

2014/15 Q2-Q4: Product development programmes implemented for both traditional and contemporary craft supported to implement production line systems to increase and improve productivity, volume and quality of product.

Lead Departments/Agencies: the dti, DAC, Craft Hubs

Supporting Departments /Agencies: IDC, SABS, CSIR, MINTEK.

2. Access to domestic and foreign Markets

Nature of the intervention

The aim of this programme is to upscale the roll-out and implementation of the Craft CSP market access programme to grow domestic and international market share for South African crafts through two main instruments:

- Establishment of marketing, retail and distribution mechanisms and channels for crafters and craft enterprises.
- Continued support and funding of craft hubs and other agencies/entities to enable them to implement and support market access programmes as well as other interventions as per the Craft CSP.

Economic rationale

A number of interventions and programmes have focused solely on improving and developing handmade craft products and increasing supply capacity, but scant attention has been paid to effective and continuous access to markets. Market access interventions have been focused on trade exhibitions, which although effective, do not provide continuous exposure to the market.

Thus, while there have been supply side interventions, there has been very little in the way of demand side interventions. Local municipalities play a central role in the establishment and regulation of both municipal and private markets as they have the authority to establish markets and manage them for the benefit of informal and formal traders.

Outcomes

Increased marketing and distribution channels; access to direct sales; sustainable job opportunities for emerging craft enterprises across the country.

Key Milestones

2015/16 Q1 – Q3: Approve and implement a marketing, retail and distribution model for craft as well as an e-commerce platform; establish provincial Craft Emporiums/Permanent Craft Markets, in partnership with four Provinces and Municipalities.

2015/16 Q1-Q4: Increase support and funding of craft hubs and Economic Development Agencies from two craft hubs and one Agency to four craft hubs and two Agencies to enable them to implement and support market access, product and enterprise development programmes.

Lead Departments/Agencies: the dti, DAC

Supporting Departments /Agencies: IDC, SABS, SEDA, SEFA

Green industries

The South African industrial sector developed over many decades on the back of cheap coal and electricity. SA finds itself in a position today where approximately 85% of our total energy supply is from fossil fuel and 85% of our electricity is generated by coal fired power plants, putting the country in a position where it has one of the highest carbon intensities (fossil fuel consumption as a percentage of total energy consumption) in the world today.

Heavy or energy intensive sectors furthermore contribute approximately 60% of the net value output of total manufacturing in South Africa. The Minerals and Energy Complex (MEC) alone contributes approximately 20% to gross domestic output in South Africa, while - if transport and storage are included this contribution rises to approximately 30% of gross domestic output. Again including transport and storage, the MEC contributes approximately 70% to exports and employs in the order of 1.5 million workers (Source: Quantec). The MEC sector is also intricately linked to other manufacturing sectors in the economy. This further complicates the challenge we face as a country because we are also in the difficult position where our energy intensity (total energy consumption expressed as a ratio of GDP) is one of the highest in the world.

Depending on the data set used, South Africa ranks approximately 22nd out of 186 countries in total carbon dioxide emissions and 20th in per capita CO_2, (which stands at around 10 metric tonnes per person/per annum). While South Africa 'only' makes a 1.5% contribution to global CO_2 levels, it comes in at an alarming 6th place when CO_2 emission is expressed as a ratio of GDP.

Given all the above, it comes as no surprise that the bulk of the capital stock in the South African economy is in the MEC and associated services sectors, with only a small percentage of the total capital stock located in the non-MEC manufacturing sectors.

While it is common cause that the main socio-economic challenges facing South Africa at present are unemployment, poverty, and inequality, there is also a consensus view that countries that do not adapt to greener growth trajectories will eventually risk serious declines in growth that will in turn only exacerbate poverty and unemployment. It is therefore clear that South Africa will have to take very seriously its adaptation to a much less carbon- and energy-intensive economy.

The structural challenges facing the South African economy are unique when compared to other comparable economies. Thus, the solutions we find with respect to energy and resource efficiency and cleaner production are also going to have to be unique. Since its inception, a central thrust of the IPAP has been the sustainable long term development of our manufacturing industry - both as a means towards addressing the deep socio-economic challenges we face and as a key driver of the transition towards massive reduction in the energy intensity of our economy. A key pillar of Green Growth in the South African context therefore has to be giving maximum priority to the development our non-MEC manufacturing sector and tilting the balance of the entire productive economy in its favour.

In the immediate term, the problem is very simple: the high carbon intensity in the South African context is a result of our reliance on coal used to generate electricity. This is now very well recognised, and the challenge has begun to be addressed by the adoption of (recently updated) Integrated Resource Plan (IRP 2010), which aims to reduce our reliance on coal used in electricity generation to below 50% by 2030. The IRP 2010 plans significant electricity infrastructure expansion and with that comes a massive opportunity to manufacture componentry for renewable energy and demand side management equipment, where we have already seen new significant investment and growth. Other opportunities include energy-efficiency equipment and services related to government buildings, industrial and commercial property, households and private and public lighting. Interventions in these areas also call for – and create opportunities for - strongly up-scaled investments in R&D, innovation and the commercialisation of green technologies, products and services.

It should be noted however that the transition will require a massive technological shift and structural changes in the economy that will not happen automatically. Both the scale and types of change required will need to be in synergy with IPAP's core development propositions, in the sense that 'front-loaded' fiscal measures will become more important in promoting the establishment of higher value-adding, labour intensive manufacturing industries with a much lower carbon footprint than our traditional sectors. Indications are that great care will need to be taken in designing the measures that will be required to manage the transition of our traditional resource processing sectors onto a greener trajectory so that they do not collapse under increasing electricity prices, possible mandatory carbon taxes and other costs associated with tighter environmental laws and regulations.

Key Action Programmes

1. Adaption of South Africa's GHG emission commitments

Nature of the intervention

In order to meet Government's mitigation objectives, and in accordance with the Department of Environmental Affairs' mandate to oversee the implementation of the NCCRP, the Department of Environmental Affairs (DEA) commissioned a Greenhouse Gas Mitigation Potential Analysis for South Africa during 2013. Through a process of identifying and analysing mitigation options, the overall objective of this study was to present a set of viable options for reducing GHGs in key economic sectors: Energy, Transport, Industry, Waste and Agriculture, Forestry and Other Land-Use (AFOLU).

Mitigation options have been identified and analysed and then combined to construct Marginal Abatement Cost Curves (MACCs) for key sectors and subsectors. MACCs show the costs and potential (in tonnes of CO_2e abated) for emissions reduction from different measures or technologies. These were then ranked from cheapest to most expensive to represent the marginal costs (in R per tonne of CO_2e abated) of achieving incremental levels of emissions reduction.

The GHG mitigation opportunities for the industry sector cover emissions from three separate sources:

- Emissions from industrial processes, from the use of greenhouse gases in products, and from non-energy uses of fossil fuels.
- Emissions from the use of fuels in stationary combustion. (Emissions resultant from the combustion of fuels in order to provide heat or mechanical work).
- Indirect emissions from the consumption of electricity, where fossil fuels are consumed in order to generate the electricity.

The next step for the industry sector is to set Desired Emission Reduction Outcomes (DEROs) and to develop an Industrial Policy Roadmap to achieve these outcomes in line with the opportunities articulated in the introductory paragraphs.

Economic Rationale

The challenge of climate change presents opportunities to improve the energy and resource efficiency of our current manufacturing sectors, to develop new industrial sectors and grow sectors with a lower energy and/or carbon intensity than our traditional energy intensive sectors. There needs to be a careful balancing act here: on the one hand, implementation of a number of mitigation options can improve the competitiveness of existing firms by reducing energy and carbon intensity; on the other, any future global and/or local GHG mitigation regime also presents immediate potential threats to the survival and competitiveness of existing industry, based as it still is on high energy and carbon intensity. In this context, environmental taxes, carbon caps, carbon budgets and associated environmental legislation will have to be handled with extreme care and attention to detail with regard to sequencing, support for energy efficiency improvements, opportunities for downstream manufacturing and the nurturing and development of new green industry sectors.

Outcome

Industrial Policy Roadmap to inform the transition to a low carbon manufacturing sector.

Key Milestones

2014/15 Q4: Agreement within government and in consultation with industry on Desired Emission Reduction Outcomes for the South African manufacturing sector.

2015/16 Q4: Industrial Policy Roadmap to inform the transition to a low carbon manufacturing sector.

Lead Departments/ Agencies: DEA, **the dti**

Supporting Departments: DoE, EDD and DST, NT.

Renewable Energy

The South African government has embarked on a Renewable Energy roll-out programme that will see South Africa securing its energy future while curbing the impact of greenhouse gas emissions and reducing unemployment. The Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) was kicked off in 2011 when government announced that 3,725 MW of renewable energy would be procured up to 2016. In the first bidding round 28 preferred bidders were selected to supply 1,416 MW, while in 2012 19 preferred bidders were selected to supply a further 1,044 MW. This commitment opened up opportunities for the development of a strong local renewable energy industry, through the manufacturing of components to supply both the independent power producers and the international market. A number of significant investments have already been made to develop capacity in the local manufacture of renewable energy components.

Due to the nature of the REIPPPP, the demand for renewable energy components is entirely dependent on the size and pace of the renewable energy roll-out. Investments are made based on the published Integrated Resources Plans and the success of these ventures will depend on a stable and continuous roll out of renewable energy in South Africa.

The most serious risks faced by investors are therefore:

- Uncertainty regarding future roll-out – i.e. when actual implementation of the REIPPPP leads to unstable demand for components (for example, where a large allocation in one bidding window may exceed industrial supply and then be followed by a smaller or even no allocation in a subsequent bidding window).
- Significant changes in the energy mix - for example a reduction in the allocation of a specific technology when updated plans are published.

One of positive spin offs of renewable energy development is that funds are being directed into the sector from government, institutional investors and individual investors both local and foreign. Between 2011 and 2013 more than R100 Billion was committed towards development of renewable energy projects in South Africa.

In order to develop the local renewable energy industry sector, **the dti** has collaborated with other government department and the broader stakeholder community to conduct extensive research to determine the localisation potential for the majority of renewable energy technologies proposed for South Africa. This research will be updated annually or as required and will inform the recommendations for future local content requirements in later bidding rounds.

2. Development of the local wind and solar industry through the REIPPPP

Nature of the intervention

In consultation with other relevant line departments, **the** dti is mandated to set local content targets for the REIPPPP. The nature of the intervention is to revise the minimum and target levels of local content of renewable energy projects linked to the REIPPPP. The aim of the revision is to increase the local content requirement to incentivise and support local industrial development and to align its requirements with the realistically anticipated state of local industrial capability. It is therefore necessary to conduct studies to assess localisation potential for all renewable energy technologies, and determine the appropriate localisation roadmaps in consultation with the broader stakeholder community.

Economic Rationale

The IRP 2010 explicitly spells out the need to support the development of a local industry for renewable technologies, in particular wind and solar. The plan is to maintain a stable roll-out programme that provides an opportunity for localisation, not only in the construction of the equipment, but in the development of skills to support the renewable programme. The total roll-out of 17.4 GW is projected to have an overnight cost exceeding R500 billion. This sheer size and long term nature of the REIPPPP provides an ideal vehicle to support the development of a competitive renewable energy manufacturing sector and related support industries that will also lead to the creation of decent jobs.

Outcome

Increased local content threshold for renewable energy projects in line with the development of a competitive local renewable energy manufacturing industry.

Key Milestones

2014/15/16: Adjustment of local content requirements with every successive REIPPPP bidding round, based on the developmental status of the component industry and demand conditions created by the REIPPPP.

2014/15 Q1: Analysis of actual local content achieved in previous bid rounds, and analysis of possible new technologies to be employed in the REIPPPP.

2014/15/16 Q2: Review the local content targets on an annual basis and make recommendations to the DoE on local content targets for future bidding rounds.

Lead Departments/Agencies: the dti, DoE

Supporting Departments/Agencies: EDD and DST, NT.

3. Designation of Solar Photovoltaic Panels

Nature of intervention

The development of the PV industry in South Africa is highly dependent on the uptake of PV technology by different market segments, which are driven by different factors. The utility-scale market segment is policy-led as it is regulated by the Renewable Energy Independent Power Producer Procurement Programme; therefore the roll-out of the PV industry in this market segment is assumed to follow the IRP schedule. The commercial/industrial and residential market segments are largely demand-driven.

Making use of mathematical equations to predict various diffusion patterns for commercial/industrial and residential market segments, and analysing different roll-out scenarios, it is projected that total size of the PV market in South Africa could reach between 11,946 MW and 20,133 MW by 2035. The rate at which the total PV installed capacity in the country grows will have a direct impact on the timescale within which certain localisation scenarios can be achieved. While South Africa currently plays a small role in the global PV market, it is well positioned to become a key participant in the future.

Currently the utility-scale market segment presents the only opportunity to support a local manufacturing industry. Further facilitation by government to develop all of the market segments will lead to a larger, more consistent demand for solar panels and has the potential to contribute to further industry growth over the coming years. Indications are that certain provincial governments are planning to install solar PV on a significant scale to supply electricity to public buildings.

Investors have also expressed interest in manufacturing solar silicon cells in South Africa; but caution will have to be the order of the day in this arena. The nature of these investments requires very significant economies of scale, access to state-of-the-art technology, a stable market and the ability to export into an extremely competitive global market. Through the REIPPPP and possible designation of solar PV panels, conditions can be improved to make investments in solar PV components manufacture attractive and viable in South Africa.

Economic Rationale

Designation of Solar PV panels is intended to increase demand and develop local supply through the development of local manufacturing capacity, thus increasing employment creation in the renewable energy sector. Development of this sector will increase a broad base of technical skills, particularly in assembly, maintenance and services, which can increase the employability prospects of trained individuals in other sectors of the economy.

Outcomes

Increase in demand for solar PV components.

Key Milestones

2014/15 Q2: Data collection, stakeholder engagement and market research.

2014/15 Q4: Decision to designate solar PV components under the PPPFA.

Lead Departments/Agencies: the dti

Supporting agencies: DoE, EDD and DST.

Carbon Tax and Green House Gas Mitigation

Climate change mitigation is an imperative from both a climate and trade and industry perspective. South Africa's production and trade will become increasingly vulnerable to carbon sensitive policies and private standards developed in other countries, some of which are being deployed with protectionist intent. The challenge for South Africa and probably all developing countries is to grow the economy while introducing energy and resource efficiency measures to reduce the dependence on fossil fuel and to transition to a much less carbon- and energy-intensive economy.

The introduction of carbon taxes, carbon budgets and emission caps while dealing with poverty, inequality and unemployment will require a high level of policy coherence across all spheres of government and a major effort to prevent policy duplication and unintended consequences affecting important economic and social challenges. Careful consideration must be given to the potentially negative impact of any carbon tax (and the costs associated with other environmental laws and regulations) on our global competitiveness - which is already a problem. This will in turn flow through to other negative consequences including a strong impetus to pass these costs onto downstream consumers or (as may be the case in steel) a threat to the viability of a key energy intensive sector.

Carbon taxes and environmental laws and regulations aim to change consumer and producer behaviour in an economy. This implies that producers or consumers will (i) reduce their energy intensity (total energy consumption per $ GDP); (ii) reduce carbon intensity (in the case of South Africa, meaning a reduction in coal consumption as a % of total energy consumption); (iii) implement structural change (produce or consume goods with a lower energy or carbon intensity); and/or (iv) close down certain carbon or energy intensive sectors.

The sectors that would be the hardest hit by carbon taxes, carbon budgets and emission caps would be the ones not able to achieve the required behavioural change in the short to medium term. In order to reduce energy intensity producers implement energy efficiency measures. Evidence suggests that this approach has been actively planned and implemented in South African industry for at least a decade or more. The main driver or motivator is the increasing pressure on South African industry to remain competitive against the headwinds of administered price increases, especially massive hikes in the price of electricity and continuing high rail and port charges.

To reduce the carbon intensity of the South African economy self-evidently requires a reduction in coal consumption as a percentage of total energy consumption. This means we have to implement cleaner energy generation options such as nuclear, renewable energy and hydro power. This is beyond the individual control of consumers and producers alike, since the bulk of the electricity in South Africa is supplied by Eskom and the generation mix is determined by the Department of Energy. The danger is that a new carbon tax (most obviously, for example, on coal-based electricity) would immediately increase Eskom's operating costs, resulting in even higher electricity prices.

The dti, as is well-known, supports measures to promote structural change in the South African economy towards more value-adding, labour-intensive and less energy-intensive sectors of production. The fact remains, however, that at present the distribution of capital stock across the economy continues to reside largely within the MEC sector. To ensure continued economic growth, job creation and poverty reduction will require measures to manage the transition of our traditional resource-processing sectors so that they do not collapse under increasing electricity prices and/or a mistimed or miscalibrated carbon tax – whilst at the same time implementing measures to improve the competitiveness and support the growth of downstream value-adding, labour-intensive sectors and the new green industry sector. These can and must include investment in green energy, industrial energy efficiency and demand-side management linked to localisation. For example:

- Componentry for green electrical generation, together with demand-side management equipment.
- Goods and services related to industrial, commercial and household energy efficiency.
- Investments in R&D, innovation and commercialisation of green technologies, products and services, to be undertaken in South Africa.
- Expanded fiscal support measures to incentivise companies to reduce emissions and/or improve efficiency. (The National Cleaner Production Centre already has 11 years' experience in this area and the existing support available under the Manufacturing Competitive Enhancement Programme can be expanded).
- Measures to ensure the shifting of relative prices in favour of less carbon-intensive, more labour-intensive and value-adding sectors; in particular, a sharp downward revision in the pricing of intermediate inputs such as steel, polymers and aluminium to levels considerably below those dictated by import parity pricing (IPP).

The Department of Environmental Affairs is mandated under the National Climate Change Response Policy (NCCRP) to implement South Africa's climate change mitigation and adaptation response. In accordance with the mitigation objectives of the Response Policy, it is necessary to understand mitigation potential in key sectors of the South African economy. These key sectors are:

- Energy
- Industry
- Transport
- Waste
- Agriculture, Forestry and Other Land Use.

A strategic mitigation priority under the Response Policy is the formulation of desired emission reduction outcomes. In achieving its mitigation objectives, the Response Policy's interventions must also "build and sustain South Africa's social, economic and environmental resilience and emergency response capacity". In order to develop the mitigation approaches set out in the National Climate Change Response Policy, the Department of Environmental Affairs has established a Technical Working Group on Mitigation, comprising of a range of stakeholders including the relevant government line departments and National Treasury, business representatives, civil society and academics. The role of the Technical Working Group on Mitigation is to provide technical advice, as well as to coordinate and align all mitigation work at sectoral and national levels.

A key element in government's overall approach to mitigation under the NCCRP is to define "desired emission reduction outcomes" for each significant sector and sub-sector of the economy based on an in-depth assessment of the mitigation potential, best available mitigation options, science, evidence and a full assessment of the costs and benefits" (DEA, 2011a).

Given these mitigation objectives, the approach to mitigation as set out by government seeks to balance the need to achieve South Africa's development priorities, the economic and social opportunities presented by the transition to a lower carbon economy and the country's contribution as a responsible global citizen to the international effort to curb global emissions.

It is recommended that the above analysis be finalised and that the optimum balance between our priorities determined by following a coherent and coordinated approach between government departments and industry stakeholders.

Waste Management and Recycling

The most recent national waste baseline indicates that South Africa generated approximately 108 million tonnes of waste in 2011. About 98 million tonnes was disposed of at landfill, with 59 million tonnes classified as general waste and 49 million tons as unclassified and hazardous. It is estimated that only 10% of all waste generated in South Africa was recycled in 2011.

The low recycling rate indicates that there are huge untapped opportunities for innovation, industrial development and employment creation in the recycling sector. This is supported by the emphasis of the National Waste Management Act (2008) puts on the re-use, recovery and recycling of waste before disposal.

In acknowledging the challenges associated with the waste sector, government has made further commitments through various programmes, including the National Waste Management Strategy (2011) and the National Cleaner Production Strategy for South Africa (2004) to promote waste minimisation initiatives with emphasis on industrial efficiency and increased recycling. The commitment to invest in waste management projects that divert waste from landfill sites through employment creating initiatives is further emphasised in the New Growth Path (2010) and the National Development Plan (2012).

Key opportunities

Through cost savings in materials and energy, recycling of waste has the potential to promote industrial resource development, greater energy efficiency, cleaner production and improved manufacturing competitiveness. Investments in the waste management and recycling sector have also been proven to make a contribution towards the achievement of national targets on GHG emissions and energy security – mainly through waste-to-energy projects.

The Waste Management and Recycling sector is also known for its significant potential to promote SMME development and employment creation opportunities, through interventions such as organised waste collection systems, beneficiation of waste as an input resource and manufacturing of new products from recyclables.

Constraints

- Mixed waste streams due to a lack of separation at source.
- Lack of a structured and regulated industrial recycling system.
- Inadequate identification of best available locally manufactured technologies to sort and process different types of waste streams.
- Under-investment by industry in the exploration of alternative ways to use waste in their processes.
- Thin information on the sectors that produce more re-usable waste.
- Insufficient attention paid to the creation of markets for products manufactured from recycled materials.
- A paucity of good incentives to support the development of an organised recycling industry.
- Lack of thorough value chain analysis of each waste stream in terms of economic value.
- Weak capacity-building and technical training.

4. Development of Waste Management and Recycling Industry Strategy

Nature of the intervention

Stakeholder engagement, facilitation and analysis to inform a Waste Management and Recycling Industry Strategy

Economic Rationale

Waste management in South Africa is largely characterised by landfill disposal rather than re-use and recycling of waste. This approach ultimately leads to long-term financial, environmental and social costs being incurred by the Government and society. Waste collection and sorting, and recycling can potentially create significant employment opportunities, reduce input material costs, protecting human health and the environment and promote industrial efficiency.

Outcomes

Waste Management and Recycling Industry Strategy.

Key Milestones

2014/15 Q2: Data collection, stakeholder engagement and market research.

2014/15 Q4: Waste Management and Recycling Industry Strategy.

Lead department: the dti

Supporting departments/agencies: DEA, DST, CSIR.

Upstream and Midstream Oil and Gas

Shale gas

On-Shore Potential

Using data collected by Soekor (now PetroSA) in the late 1960's, the US Energy Information Administration (EIA) estimated that South Africa has potentially 485tcf of total recoverable shale gas resources. This figure has subsequently been revised downwards to 390 tcf. The task team appointed by the Department of Mineral Resources (DMR) to investigate South Africa's shale gas potential - on the back of the EIA's projections - suggests that South Africa has perhaps 30 tcf of recoverable shale gas from the 485/390 tcf of resources estimated by the EIA.

Whether or not the 30 tcf is an under-estimate, shale gas still has the potential to be a "game changer" in terms of South African energy self-sufficiency and economic development. This clearly indicated in the table below, which outlines only large beneficiation projects with little domestic or commercial demand. To realise this potential however, it is essential that South Africa get its policy decisions correct and ensures that it is able to leverage this resource to achieve its industrialisation and social objectives, while at the same time ensuring that it avoids issues related to the "resource curse".

Gas utilisation option	Gas resource required over 20 years
Gas To Liquids (80 thousand barrels per day)	5.2 tcf
Gas To Methanol (5 000 tonnes per day	1.1 tcf
Gas to Power (600 MW CCGT)	0.6 tcf
Liquefied Natural Gas - LNG (10 Million Tonnes pa	5.6 tcf

As a starting point it is important to appreciate the reasons and circumstances that led to shale gas being a "game changer" in the United States - and why the South African situation is so different. For instance, the United States already had a viable gas market, with a well-established distribution infrastructure. South Africa does not. This difference poses some interesting questions for South Africa to consider – namely:

- Distribution and sale of shale gas: should South Africa invest in gas distribution infrastructure or should it transport gas to the local and foreign market via liquefied Natural Gas (LNG) or Compressed Natural Gas (CNG) tankers?
- Electricity generation: should gas be directly used for industrial and commercial purposes or should it be converted to electricity?
- Gas to liquids (GTL): Both PetroSA and Sasol have significant GTL capabilities; so the question arises: should shale gas be used as a feedstock into this process? What sorts of interventions are required to develop first-mover technological advances - as was done with Fischer Tropps in the '60s - such as innovation with the direct gas-to-methanol process?
- Localisation: What sorts of interventions are required to ensure that South African companies are able to support the exploration, drilling, infrastructural and operational needs of this industry?
- Building forward and backward linkages: What sorts of interventions are required to ensure that South Africa is able to build its capacity in terms of developing technologies used in exploration activities or in adjacent industries and ensure that economic multipliers in other sectors are maximised?

The questions posed above are by no means an exhaustive list. They merely serve as an illustration of the complexities involved in unlocking the "game changing" potential of this resource. It is thus imperative that South Africa develop a comprehensive strategy to tackle the issues raised above. **The dti** has a vital role to play in this process, especially when dealing with issues concerning (but not limited to) localisation and the building of forward and backward linkages.

Key Action Programmes

1. Strategy to leverage opportunities presented by SA's shale gas resources

Nature of the intervention

The intervention is aimed at developing an industrial strategy that can support the optimal exploration and extraction of SA's shale gas resource. This will include an analysis of the backward and forward linkages in terms of the upstream localisation opportunities in the capital equipment and metals fabrication sector and downstream polymer beneficiation opportunities for the plastics sector. The strategy will investigate gas as a potential long-term low cost energy option and include an assessment of the regulatory, policy, financing and technology requirements to exploit the resource.

Economic Rationale

SA probably has among the top 10 resources of shale gas in the world, even if the originally estimated 390 trillion cubic feet (tcf) of technically recoverable resources proves not to be so. But the stakes nevertheless remain high. Preliminary economic modelling results indicate that 30-50 tcf of recoverable reserves over a 25 year production period would have upstream value-added potential of R2,142 bn. The predicted impact on employment across the entire value chain (assuming a recovery of 50 tcf over a 25 year production) is on average 700,000 jobs.

So the "game changer" scenario is indeed possible: provided that a clear strategy is developed that establishes and strengthens the linkages into and out of the possible shale gas industry so as to leverage the full economic impacts of the resource.

Outcomes

A strategy that analyses the upstream and downstream opportunities - including required mechanisms for support, gas as a potential low cost energy option, infrastructure requirements and technology assessment.

2014/15 Q1: Identification and analysis of the shale gas upstream localisation opportunities 2014/15.

2014/15 Q2: Identification and analysis of the downstream localisation opportunities.

2014/15 Q3: Analysis of gas as a potential low cost energy source and infrastructure requirements (distribution, reticulation, compression, liquefaction etc.)

2014/15 Q4: Analysis of the regulatory, policy requirements and mechanisms of support.

2015/16 Q1: Analysis of the technology and financing requirements and mechanisms of support.

Lead departments/agencies: the dti, DMR, DOE, EDD

Supporting departments/agencies: the dti, EDD, DWEA, DST, PASA, CEF

Off-shore potential

Sector profile

Sub-Saharan Africa is one of the fastest growing and highest potential oil and gas exploration and production locations in the world, estimated to constitute 10% of global reserves. There is significant oil and gas activity on both the West and East coast of Sub-Saharan Africa, with the East coast in particular seen as a game changer for the global gas industry.

The past 24 months has also seen significant interest in deep water prospecting activity around South Africa's coast line. Many of the major Oil & Gas players have acquired or are in the process of acquiring exploration licenses for deep water blocks along the South African coast. For example:

- 10 February 2012: Royal Dutch Shell was awarded an exploration license in the Orange Basin Deep Water area, off South Africa's west coast.
- 16 August 2012: PetroSA and Carin India Group ("Carin India") signed a farm-in agreement for crude oil and natural gas exploration in offshore block 1 in the Orange Basin on the west coast of South Africa.
- 17 December 2012: ExxonMobil, the world's largest publically traded international oil and gas company, signed an agreement with a subsidiary of Impact Oil & Gas Limited, to acquire a 75% participating interest in the Tugela South Exploration Right and will become the operator.
- 30 September 2013: Total completed the acquisition of a 50% interest in Block 11B/12B in the Outeniqua Basin, from CNR International (South Africa) Ltd, a wholly owned subsidiary of Canadian Natural Resources Limited. Total expects to drill its first well before the end of 2014.

- 13 November 2013: Sasol (Sasol Petroleum International) obtained an Exploration Right Permit to explore for hydrocarbons off the East Coast (Durban and Zululand Basins), offshore of Kwazulu-Natal province.

Latest estimates (November 2013) indicate that there are approximately 72 rigs in West Africa, 8-10 rigs based in East Africa and a further 42 Floating Production Storage and Offloading (FPSO) facilities s operating in the region - with these numbers set to increase once more fields are brought into production and exploration activities commence around South Africa's coast line. As a rule of thumb, each rig typically requires between 8-10 support vessels and as a result support vessels of various types account for around 80% of the offshore fleet.

With exploration activity in the region set to increase over the next 5-10 years, the servicing and repair of oil and gas vessels could yield substantial returns for South African firms and the country as a whole. Given that South Africa already boasts industrial capacity associated with maritime and rig repair, in addition to capacity associated with mining-related industrial technology, it is strategically and technically well-positioned in the Sub-Saharan African region to capitalise on the growing regional commerce in offshore oil and gas by positioning itself as an oil and gas marine engineering and servicing and supply hub.

The Saldanha Bay IDZ/SEZ

The Saldanha Bay IDZ (SBIDZ), launched in October 2013, will house an oil & gas marine engineering and logistics complex within a customs-free area. The service offerings of the SBIDZ can be loosely grouped as follows:

- Repair & maintenance;
- Fabrication;
- Logistics and other services.

The SBIDZ could potentially service up to three rigs at a time, with contract values of R10 - R500 million. Engineering services could be supplied *in situ* not only to floating units, but also to fixed platforms, of which there are estimated to be over 800 in the region in total. Fabrication work would be linked to the construction of new units, as well as conversions, upgrades and major repair jobs.

The SBIZ would also function as a regional logistics centre supplying spare parts and specialist staff to smaller offshore supply bases throughout the region, replacing goods and services which are currently supplied to West Africa from centres in Aberdeen, Stavanger and Houston. At the same time, pipes, cement, oilfield chemicals, equipment and other commodities needed for oil and gas exploration and production would be stored in open and closed on-site warehousing facilities. It is estimated that the SBIDZ could initially generate 2,600 direct and indirect jobs, with this figure rising to 15,000 jobs as the SBIDZ gains traction.

By January 2014 the SBIDZ licensing company had signed six lease agreements with international and South African oil and gas companies. In addition the licensing company was in talks with an international consortium which is willing to invest R200 million to develop a rig module building facility and which has the potential to generate approximately 300 jobs.

These developments suggest a strong vote of confidence in the SBIDZ and an understanding of its objective of establishing itself as a world-class oil and gas servicing and supply hub.

Key Opportunities

Based on the preceding discussion, the immediate opportunities within this sector lie in the following broad categories:

- **Upstream Ship Repair and Servicing Hub:** The repair, maintenance and upgrading of various kinds of oil and gas marine vessels such as drilling rigs, pipe laying vessels and various kinds of work barges.
- **Oil and gas logistics and distribution:** South Africa has the potential to build major logistics points to service the burgeoning growth of the oil and gas sector across the Sub-Saharan region.
- **Engineering services** that design, fabricate or construct specialised modules or facilities for the oilfields - e.g. storage tanks, processing modules for offshore platform or onshore facilities, docking facilities, tugs/barges, civil structures and platforms etc.
- **Equipment and materials suppliers** providing a wide range of pumps, valves, pipes, motors, instrumentation, and process equipment for the specialised needs of the upstream industry.

- **General and technical support services** for the upstream industry. General services include legal, financial, IT, medical, hospitality, recruitment and many other services that can be competitively supplied from South Africa. More technical services include a significant cluster of firms doing inspection and maintenance, training, diving services, remotely operated undersea vehicle operation and repair, health and safety services etc.

Constraints

The development of a world class oil and gas servicing and supply hub requires efficient and effective port and back-of-port infrastructure. In this context, the South African oil and gas industry has faced significant challenges regarding access to often inadequate facilities at South African ports. In other words not only do firms operating within this sector have trouble accessing port facilities, but these facilities have often been inadequate to service the demands of the highly specialized oil and gas industry.

Having recognised the potential multiplier effects of this industry, **the dti**, DPE and NPA completed a study that looked into the challenges faced by industry at South African ports and how best to address them. Findings from the study highlight several bottlenecks that are preventing the further development of port-related industries. These bottlenecks could be summarized as follows:

- **Administrative/Operational issues** ranging from working hours and labour practices at ports to issues concerning costs and the terms and conditions when operating in the ports.
- **Port Infrastructure -** with specific regard to ship building - is in a poor condition and will require significant investments to made in order to get these facilities to an internationally competitive standard.

Key Action Programme

1. Developing a ship/rig repair implementation strategy

Nature of the intervention

Having recognised the potential multiplier effects of this industry (and other port-related industries) **the dti**, the DPE and NPA have resolved to jointly develop a ship/rig repair implementation strategy. This strategy will be informed by the findings of the recent investigation into port related industries that was commission by **the dti,** the DPE and NPA during the previous financial year.

The objectives of this strategy will be to develop a way forward in terms of implementing the recommendations of the ports industry study.

Economic Rationale

Port related industries have the potential to generate a significant number of jobs through the opportunities located within its vast value chain. Unlocking these opportunities requires the ports system to operate in an efficient and effective manner. Getting the operating procedures and practises at South African ports correct and ensuring that the physical infrastructure, both in terms of port and back of port infrastructure, is in place is absolutely vital for South Africa developing into a world class oil and gas (ship repair) servicing and supply hub.

Outcomes

A ship/rig repair implementation strategy that seeks to establish a world-class oil and gas servicing hub.

Key milestones

2014/15 Q2: The DPE/**dti**/TNPA joint task team will develop a ship/rig repair implementation strategy that seeks to address short, medium and long term constraints through the implementation of tangible projects. Arising from this a "product offering" and requisite marketing material to drive an investment promotion programme will be developed.

2014/15 Q4: Launch of an Investor Conference that will showcase South African capabilities within this sector**.**

Lead departments/agencies: DPE and **the dti**

Supporting departments/agencies: Transnet/TNPA, SAOGA, Provincial Governments and Local Councils.

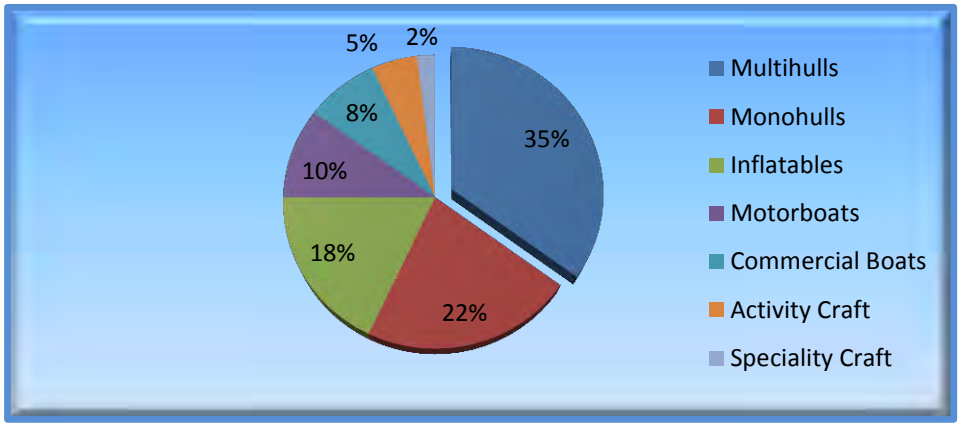
Boatbuilding and Associated Services Industry

Sector Profile

The South African ship/boatbuilding sector has developed a particular strength in sailing multihull catamarans, with some South African companies seen as global leaders. South African companies have also developed capacity in niche segments in commercial and public sector markets, e.g. fire-fighting boats and crew transport boats for the oil and gas sector. There has also been some diversification into power catamaran production. South Africa enjoys a reputation for good quality and customisation, as well as competitive labour costs relative to developed world manufacturers. Therefore the South African ship/boatbuilding industry has a competitive advantage in labour intensive processes (e.g. hull construction).

The commercial ship/boat sub sector continues to experience substantial market growth - in particular growing its market share into Africa substantially. Reports show that there is a 50% year-on-year growth in the supply of crew transfer vessels and other commercial craft. This sub-sector covers high speed offshore craft, ferries, water ambulances and working vessels being supplied into African countries where road infrastructures have collapsed and navigable waterways are the most effective transport method for promoting economic growth and development. The market advantage lies in design, build and delivery of semi-customised vessels to high quality levels, including international maintenance and repair services. The South African ship/boatbuilding industry is sub-divided into seven categories. (See below).

Figure 33: The contribution of each sub-sector in the boatbuilding industry



The manufacture and repair of ships and boats in South Africa is viewed as a highly strategic industry, with an employment multiplier for ship repair of between 4 and 7. (i.e. for every direct job, between 4 and 7 indirect jobs are created). This generates employment and other positive spin-offs across numerous sub-sectors in the ship/boatbuilding industry. The repair industry is very labour-intensive, with employees making up the single largest cost in the industry, estimated at 25% of the cost of sales. With between 2,000 and 3,000 people directly employed in the sector, this translates, via the multiplier effect, into total employment of around 12,000 people.

Ship repair is an industrial rather than a transport activity; measures that might assist ship repairers to develop their capacities and create new jobs must be considered in conjunction with all the other measures intended to promote secondary industry. Research has indicated that the turnover of the ship repair industry varies considerably from year to year; but, for example, at full capacity the work value of ship repairs undertaken in Durban is estimated to be in the order of R1.5 billion.

Statistics indicate that the commercial ship/boatbuilding sector continues to maintain a positive trade balance. Exports across the sub sector grew, increasing from R110m in 2011 to the current level of R1.4bn, imports in the sector also increased from R67m in 2011 to R1.3bn in 2012.

Sector statistics

Variable	Contribution in 2012
Manufacturing employment	5 600
Trade balance	R 58 million

Based on the current capabilities and performance, the South African boatbuilding industry faces the following opportunities and constraints:

Key opportunities

- Opportunities to expand exports in non-traditional markets driven by industrial development and tourism development in emerging markets including sub-Saharan Africa and the Middle East.

- Substantial growth opportunities in the commercial boat market, particular in sub-Saharan Africa, with an emphasis on offshore speed craft, ferries, water ambulances and working boats.
- Opportunities to develop training, repair and maintenance operations in sub-Saharan Africa.
- Opportunities to increase innovation through collaboration between industry and research organisations to improve the competitiveness of the industry in terms of international standards.
- The development of sector-specific training and skills improvement programmes.

Constraints

Constraints to the development of the domestic market include:

- Lack of available berths and inadequate mooring infrastructure.
- Lack of price competitiveness, given the fact that we are so dependent on imports for a high proportion of components.
- Lack of transformation in the industry - mainly because of high production costs and the high cost of starting a business in this industry.
- Shortage of skilled labour and scarcity of highly specialised skills.
- Lack of finality on the future ports expansions programme.
- Currency volatility: because ship repair is largely US Dollar-based, the (previous) strength of the Rand, followed by its more recent sharp weakening, have caused difficulties for the local industry in meeting budgets predictably.

Key Action Programmes

1. Boatbuilding Skills Development Programme

Nature of the intervention

The skills challenge in the ship/boatbuilding industry demonstrates the need to develop a specialised skills training programme aimed at addressing skills deficits across the entire value chain nationwide in support of the growth potential of the industry.

The Boatbuilding Skills Development Programme seeks to establish a centralised, centrally funded, industry-driven training initiative that includes an apprenticeship system and an effective industry support mechanism, for the enhancement of the global competitiveness of the industry. The intervention proposes the implementation of a National Boatbuilding Training Programme to address the following concerns:

- Sectoral skills deficit;
- Lack of information on skills development and training;
- Mismatch between industry needs and the forms of training currently available;
- In-house training – which is generally informal, inconsistently applied and production-dependent;
- Deficiency of specialist trainers;
- Lack of innovation and technology development; and
- Unavailability of training beyond NQF Level 4.

Economic rationale

In South Africa, the ship/boatbuilding industry is characterised by a shortage of skilled labour, scarcity of highly specialised skills, a technical knowledge deficit at both shop-floor and middle management level, and lack of high-level composite training and project management skills. Research indicates that despite the implementation of various in-house skills training programmes (which remain largely informal, inconsistently applied, and order-book dependent), the challenge of unavailability of specialised skills needed for the growth of the sector remains urgent throughout the industry, and particularly in the smaller towns. This situation has had an ongoing negative impact on the skills base, resulting in persistent technical knowledge deficits at shop-floor level and at middle management levels – including loss of tacit marine knowledge gained through years of experience in the industry and limited opportunities for upward mobility of employees who remain unqualified.

The ship/boatbuilding industry is in the process of being designated for local procurement. The designation will result in higher local demand for world class vessels to be produced locally at competitive prices. Therefore, a pool of skilled people with innovative capacity will be needed to match the quality and quantities required for working vessels and thus enhance the competitiveness of the industry.

Outcomes

Creation of a pool of skilled workers to address the skills deficit in the core boatbuilding industry and wider value chain; consolidation of industrial placements and enhancement of innovation and technology-use in the sector; enhanced international competitiveness.

Key milestones

2014/15 Q1 - Q2:	Development of a skills strategy with options that will inform the development of demand-led skills programme.
2014/15 Q3:	Industry consultations on the architecture of the skills programme.
2014/15 Q4 - 2015/16 Q1:	Development of the institutional arrangements that will govern the implementation of the skills plan.
2015/16 Q2:	Implementation of the skills development programme.
2015/16 Q3 - Q4:	Monitoring and evaluation; feedback translated into adjustment of the implementation process through the establishment of a Technical Working Group (TWG) on skills strategy that includes industry, **the dti** and the training institutions.

Lead department/agencies: the dti

Supporting department/agencies: NT, SETA, DHET, DOT, Industry.

2. Formation of a ship/boatbuilding/repair cluster

Nature of the intervention

To assess the feasibility of establishing a shipbuilding and repair cluster for the ship/boatbuilding industry.

Economic rationale

Since this is such a segregated (insulated) and complex industry it is important to encourage industry clustering. All the sub-sectors all experience similar constraints - e.g. infrastructure, skills development, transformation, etc. The initiative will assist industry to be more productive, internationally competitive and better positioned to gain access to financial resources to invest in tooling and upgrading of facilities.

Clustering can also encourage collaborative approaches within the industry, with related sectors sharing relevant services between them. The outcomes of these collaborations can be beneficial in growing the industry to be more competitive, principally by looking at joint development of infrastructure or equipment and joint approaches to training, as well as by identifying and inviting key external stakeholders to collaborate with the local ship/boatbuilding and repair industry.

Outcomes

Create a cluster for the ship/boatbuilding and repair industry to address the constraints the industry face as a collective and build international competitiveness.

Key milestones

2014/15 Q1 - Q2:	Conduct research into clustering opportunities in the shipbuilding/ repair industry in locations that can offer suitable space for ship/boatbuilding and repair.
2014/15 Q3 – Q4:	Commence consultation process with relevant stakeholders on the feasibility of establishing a ship repair cluster. Facilitate workshops to inform ship/boatbuilding industry about the cluster idea and identify potential cluster participation.
2015/16 Q1 - Q4:	Finalise the modalities of establishing the shipbuilding and repair cluster in collaboration with industry and stakeholders.

Lead department/agencies: the dti

Supporting department/agencies: Industry, MIASA, SAMSA, eThekwini Maritime Cluster, SA Association of Shipbuilders and Repairs, TNPA.

3. Industry Standards and Accreditation

Nature of the intervention

Develop standards for quality, safety and environmental compliance in order to enable all boatbuilding firms to build to international standards, increase competitiveness and access to international markets. The strategy will be phased in over a period of 5 years and support programmes will be established to help offset the often prohibitive costs associated with changing manufacturing processes and tooling to build to internationally competitive standards. The industry accreditation programme will be reviewed and a study undertaken to explore its applicability to the wider boating sector.

Economic rationale

Increasing the quality and standards of products increases the manufacturer's ability to sell products competitively into both local and international markets and, consequently, grow aggregate sector exports. The accreditation process will highlight areas of concern within firms and design interventions to address identified shortcomings that can be implemented at firm level. Creating a baseline production standard will increase consumer confidence and spending.

Outcomes

Local manufacturers will be able to more easily move into the export arena and will also be able to compete locally against imported vessels. Increasing the quality of the vessels built will ensure safety for the boating public in South Africa and assist in marketing efforts to promote the activity of boating to a larger audience. The accreditation system will improve the level of ethics and business management across the industry, leading to both increased accountability and reputation-building.

Key milestones

2014/15 Q1-Q2:	**the dti** and industry to review the current Accreditation system and look at necessary changes to structure and implementation.
2014/15 Q3 - 2015/2016 Q3:	**the dti** in conjunction with SABS to develop standards of phased approach to the implementation of international standards across the industry.
2016/2017:	Phased implementation of standards and review of the accreditation programme.

Lead department/agencies: the dti, SABS, industry stakeholders.

Nuclear Energy

The Department of Energy (DoE) promulgated the Policy Adjusted Integrated Resource Plan for Electricity (IRP) 2010- 2030 in 2011 which provided for 9.6 GW of additional generation capacity from nuclear energy, as part of a balanced energy mix that will ensure supply security and mitigation of CO_2 emissions. The policy adjusted IRP 2010 indicated that the first unit is planned to start commercial operation in 2023.

Following up from this, in December 2013 the DoE released the updated IRP for public comment. The updated IRP indicates that while the policy adjusted IRP 2010 remains the official government plan for new generation capacity (until replaced by a full iteration) the update is intended to provide interim insight into critical issues for consideration before key decisions are taken. The document engages with two main areas of change: ongoing shifts in the underlying relationship between economic growth and optimal energy requirements, and - following from this - adjusted projections of future electricity demand. It projects lower than previously envisaged electricity demand up to 2030, with the consequence that at least 6,600 MW less capacity is likely to be required over the period. This projection takes into account the aspirational economic growth rate suggested by the National Development Plan (an average of 5.4% per annum until 2030) as essential for effective reduction of unemployment and poverty alleviation in South Africa.

The update points out many of the variables that are in play, inevitably creating a range of uncertainties. In this context, it suggests that a preferable alternative to a fixed capacity plan (as espoused in the IRP 2010) would be a more flexible approach taking into account different possible outcomes based on changing assumptions and scenarios. It also explores some of the likely determinants of key investment decisions under different conditions.

Of particular importance to the nuclear sector is that, in line with the energy demand scenarios it considers, no new nuclear base-load capacity may be required until after 2025 - as opposed to the 2023 date provided in the IRP 2010. The effect of this, from a planning point of view, is that over the shorter term (the next two to three years) the decision on nuclear upgrade can be delayed.

Key opportunities

This being said – and with an eye to the longer term - the nuclear build programme envisaged in the IRP still presents substantial opportunities for the development of a local nuclear manufacturing industry. South Africa already has a significant level of nuclear expertise that can be leveraged and serve as a catalyst in meeting the country's desired localisation levels, in tandem with the evolution of the procurement process.

Over the past three years, the Nuclear Energy Sub-Working Group (NESWG) has already completed (at high-level): (i) A Nuclear Localisation Strategy and Implementation plan; (ii) a Nuclear Skills Development Strategy; and (iii) the architect engineering organisation's recommendations in anticipation of the announcement of the nuclear procurement process.

Constraints

- Meeting nuclear quality accreditation and regulatory standards;
- Improving technology and skills transfer from the main nuclear vendors and the many global component suppliers;
- Developing an appropriate combination of global partnerships and access to global supply chains, funding and skills development; and
- Careful phasing-in of investments into the programme and into appropriate government-led programmes to ensure that local procurement is boosted and localisation enforced.

Key action programme

1. Localisation of Nuclear Components and Services

Nature of the intervention

Increased interaction with industry to determine optimum alignment of government's localisation aspirations and industry potential.

Economic rationale

Localisation is intended to ensure:

- Increased industrial capacity and potential contribution to GDP;
- Promotion of technology and skills- transfer from the main nuclear vendors and suppliers of nuclear-grade components to the South African industry;
- Promotion of joint ventures, consortia and partnerships;
- Enhancement of exports into the global nuclear supply chain;
- Creation of high-level direct jobs and associated intellectual property.

Outcomes

The development of industrial support policy and measures, which will subsequently lead to the development of localisation strategies and plans to support local industry development.

Key milestones

Given the uncertainties with regard to possible kick-off dates for the nuclear build programme, the milestones will be only be finalised once more clarity emerges from the ongoing debates around the updated IRP.

Lead department: DoE, the dti

Supporting departments/agencies: SANAS, DMR, DST, EDD, DPE, NT, NNR, NECSA, Eskom.

Advanced Manufacturing

Advanced manufacturing has been recognised globally as a potentially very important avenue towards reversing de-industrialisation and creating decent, productive, well-paying jobs. Combinations of new and old knowledge and technologies (components of advanced manufacturing) are increasingly being recognised as advanced and specialised factors of production to complement traditional factors (labour, materials, capital goods, energy, etc.) in the manufacturing sector. Evidence of this can be found in international think tank reports and in the global government manufacturing policy discourse which recognises talent-driven innovation and technological advancement as key drivers of global manufacturing competitiveness.

In essence, advanced manufacturing is an approach that:

- depends on the use and integration of information, knowledge, state-of-the-art equipment, precision tooling, automation, computation, software, sensing and networking;
- makes use of cutting-edge materials and new industrial platform technologies that have multiple commercial applications (e.g. composite materials) while also delivering strong spill-over effects; dynamically exploits emerging physical and biological scientific capabilities (e.g. nanotechnology, biotechnology, chemistry and biology) and incorporates green manufacturing philosophies;
- mobilises high-level design methods and creates highly developed multi-disciplinary skills teams and networks.

The defining characteristics of advanced manufacturing may be summarised as follows:

- Product innovation: making new products emerging out of new advanced technologies (including processing technologies).
- Process innovation: new methods of making existing products (goods or services).
- Organisational or business model innovation: combining new or old knowledge and technologies with traditional factors of production and applying them in unique configurations to non-traditional fields or disciplines.

It is well established that firms that adopt advanced manufacturing practices exhibit stronger productivity growth, higher real wage increases and strong multiplier effects, giving them significant competitive advantage over their peers. Importantly, advanced manufacturing also creates skills and technologies that spill over into adjacent industries. It is therefore imperative for South Africa to embrace and adopt advanced manufacturing approaches alongside conventional manufacturing methods for growth, employment and international competitiveness.

Advanced manufacturing should not be seen as a sub-sector of the economy, but rather as a cross cutting approach to be adopted by incumbent and emerging manufacturers, irrespective of firm size or sub-sector. Indeed, advanced manufacturing spans the full spectrum from large aerospace companies all the way down to small companies created through spin-outs out of university research. It can also play an important role in improving the competitiveness of traditional and/or distressed sectors such as the clothing and textiles, footwear and foundry industries.

In this regard, a number of companies in the milling and animal/pet food industry, including major players SASKO and Feedpro, have been assisted with product development through extrusion and have been able to order their customer-specified extruders from North West University's Advanced Manufacturing Centre. These innovative interventions have already created about 70 new jobs and introduced a number of new products that were not previously available in the market.

Key opportunities

South Africa's advanced-materials industry has pockets of research excellence situated in universities and science centres; and also in certain manufacturing industry clusters that are internationally competitive. The next big move – from research-derived knowledge to commercialisation of advanced materials is critically important, particularly in the areas of nano-materials, high-performance materials based on advanced bio-composites, composites, intelligent textiles used in the medical, building and construction industries and continuous fibre-reinforced thermoform composites.

Constraints

- Insufficient numbers of engineers working on already-developed technologies.
- A small domestic market for the utilisation of advanced materials.
- Slow commercialisation of innovation.
- Nearly all significant R&D and commercialisation work is undertaken by state research institutions and universities, with few industry players participating. This means that they do not benefit from the variety of funding instruments that currently exist – which seriously retards opportunities for commercialisation of innovation and smart industrial development in general.
- Commercialisation entails a range of risks and most industry participants still tend to be highly risk-averse, preferring to work on already commercialised technologies. This is a clear example of market failure, calling for strong government intervention.

Key Action Programmes

1. Commercialisation of Natural Fibre Reinforced Composites

Nature of the intervention

The establishment of pilot-scale manufacturing facilities and specialised testing equipment for proof of concept of new products developed from natural fibre based composite materials, with applications in the aerospace, automotive, boatbuilding, renewable energy and building and construction industries.

Economic rationale

The increased interest in natural fibre reinforced composites (bio-composites) is driven by economic and technical considerations as well as heightened environmental awareness. The advantages of bio-composites include cost and weight savings, a reduced environmental footprint, reduced energy consumption in production, and health and safety benefits. There is also potential for new enterprise development and job creation, including in rural communities. Fibre crops may provide up to three times the value that farmers can extract from traditional textile and handcraft applications.

Outcomes

Pilot and up-scale agricultural fibre production and processing, commercialisation and implementation of various composite manufacturing technologies (including resin infusion, compression moulding, pultrusion, extrusion and injection moulding); and facilitate the establishment of natural fibre value chains.

Progress and update

The DST-funded Bio-composites Centre of Competence (BCC) hosted by the CSIR, is supporting interdepartmental coordination of R&D-led industrial development.

An independent panel review of the value proposition of the BCC was concluded.

Crop trials have been conducted by the Agricultural Research Council (ARC), positioning the local cultivation of kenaf for up-scaling.

An audit of public sector research, development and innovation capabilities has been conducted and has identified the country's main opportunities and gaps in relation to bio-composites and, more broadly, composites in general.

Prototype composite parts for aircraft, automotive and building applications are being completed.

Key milestones

2014/15:	Implement the Management Response to the independent panel review of the BCC's value proposition.
2014/15:	Undertake several techno-economic studies to assess the viability of new bio-composite products.
2014/15:	Upscale agricultural processing of natural fibres suitable for bio-composite products.
2014/15:	Development of composite manufacturing and testing capability to support industry adoption of natural fibres into composite applications.
2014/15-2015/16:	Prototyping, trial manufacture and limited manufacturing in partnership with industry.

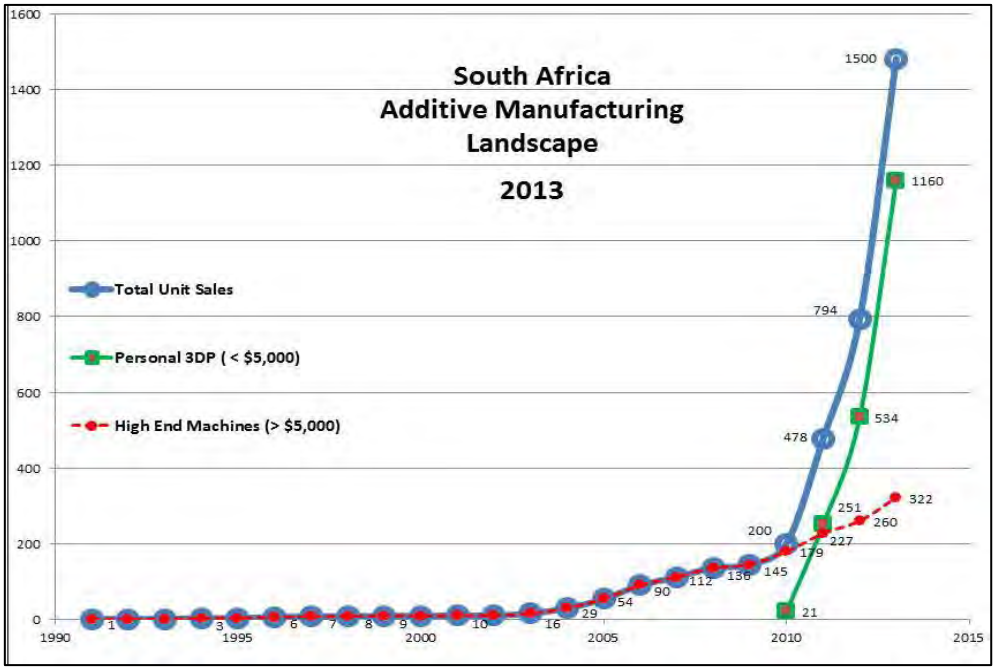
Lead departments/agencies: DST, **the dti**, DAFF and CSIR

Supporting departments/agencies: EDD, DRDLR, ARC, TIA, NRF.

Additive Manufacturing

Additive Manufacturing (or 3D Printing as it is more commonly known) is the process of joining materials to make objects from 3D model data, usually layer upon layer, as opposed to traditional manufacturing methods such as machining or casting. It is a process to manufacture parts rapidly by taking a 3D model of a part, "slicing" that model into thin layers and then building the part layer-by-layer in a machine, choosing from a variety of materials. Additive Manufacturing allows a user to "print" a physical representation of any object. This advanced manufacturing method finds application in a number of industries including aerospace and defence, clothing, footwear and textiles, medical industries, and automotive. It is also used to create bespoke jewellery, sculptures, movie props (scale models) and other products in the creative and fine arts.

Figure 33: Additive manufacturing in South Africa



Source: Courtesy of Prof J de Beer (VUT)

The DST is working with **the dti** to develop an Additive Manufacturing Technology Roadmap, which will help government identify, define and prioritise future product and market opportunities.

The implementation of the Additive Manufacturing Technology Roadmap will improve existing firm and industry competitiveness, leading to the creation of new opportunities through incremental and disruptive technological innovation.

Impact on competitiveness

"Additive Manufacturing is the next step in manufacturing and represents a new manufacturing paradigm. As a disruptive technology it has the potential to radically change manufacturing as we know it"

Key opportunities

Opportunities have been identified in number of areas including the aerospace industry - where small engine components, large structural components, rocket nozzles and satellite components are already manufactured - as well as in the tooling, medical devices and footwear industries.

Economic Rationale

Advantages of Additive Manufacturing over conventional manufacturing processes include short lead times (in the order of days or even hours), no tooling, high complexity, freedom of design (almost any shape can be made), moving parts (integrated joints and couplings), customisation and the use of various unconventional combinations of materials (including nylon, polycarbonate and even metals such as titanium, aluminium, and stainless steel).

South Africa's competency in Additive Manufacturing has built up steadily over the past two decades and there are pockets of world-class excellence emerging at universities and local companies that can be leveraged by government to improve the competitiveness of local industries.

There are approximately 1,600 3D printers in South Africa and estimates for 2013 place total Additive Manufacturing systems sales at R86 million in South Africa.

The global 3D printing market (consisting of all 3D printing products and services) grew at a cumulative average growth rate of 28.6% to US$2.2 billion in 2012. The market is expected to grow to US$4 billion by 2015, about US$6 billion by 2017 and to around US$11 billion by 2021. South Africa needs to ensure that it taps into these growth opportunities.

Constraints

- Insufficiently widespread awareness of Additive Manufacturing across manufacturing industry as a whole.
- Perceptions that additive manufacturing is useful only for product design and prototyping; lack of awareness that Additive Manufacturing has matured to the point where functional parts can be made.
- SMEs have limited access to Additive Manufacturing; 3D printing bureaus are not widespread and public-funded centres have limited funds for subsidised access by SMEs to their equipment.
- No central location or portal where potential users can go to get information and advice on Additive Manufacturing (systems, machines, raw materials, design software, 3D scanning, printing bureaus, etc.).
- High raw material costs.
- High cost of industrial-level Additive Manufacturing systems compared with traditional manufacturing methods.
- Lack of Integration of AM systems into production systems.
- Insufficient availability of appropriately skilled operators and technicians.

Key milestones

2014/15 Q1: Finalisation of the Additive Manufacturing Technology Roadmap.

2014/15 Q4: Launch of an Integrated Additive Manufacturing Industry Support Pilot Project

Lead Departments and agencies: DST, **the dti,** CSIR, TIA, Industry, academia.

Aerospace & Defence

The aerospace and defence industry is a cluster of private and public sector organisations, including commercial companies and business units, which are directly or indirectly involved in the provision of goods and services to security forces and civil society. The 2011 statistical survey of the South African Defence-Related Industry (SADRI) indicated that it has an annual turnover of about R12.9 billion (compared to R10 billion when the last official survey was undertaken in 2008/2009). Its exports increased from 50% to 60%.

The sector invests roughly R1.3 billion in technology and R&D development annually, and has consistently provided employment for about 15,000 highly skilled engineers, technicians and artisans – many of them contributing to key national projects in space, transportation (including rail safety), mining, construction, power generation and telecommunications. Conservatively, the sector is estimated to have multipliers of 1:4 and thus supports at least 60,000 further jobs in the economy. The 2012 financial statistics of the National Conventional Arms Control Committee (NCACC) indicate that Contracting Permits to 80 countries (amounting to R171 bn) were issued; Export Permits to 89 countries (amounting to R10.6 bn) and Import Permits to 67 countries (amounting to R3.2 bn).

The above statistics indicate that the technological intensity of the aerospace and defence sector acts as a driver for new technologies and technical skills, which are diffused to other sectors in the economy, thereby intensifying industrialisation and contributing to evolution towards a knowledge economy.

Past progress and updates

The Aerospace Sector Development Plan made a number of key recommendations for the future development and growth of the industry. The establishment of the Joint Aerospace Steering Committee (JASC) was the main recommendation, allowing for interventions and coordination on clustering, skills development, national programmes and positioning of the aerospace industry. With its membership drawn from government departments, industry representative bodies, R&D and development finance institutions, the JASC was formally launched in October 2012. It has been able to coordinate and integrate on a number of issues around policy, grant funding and industry positioning.

A flagship project in the domain of unmanned aircraft systems has been launched, in which government, industry and R&D organisations are focusing on expediting technology and market development in this area of consistent high growth and technology development.

The JASC is deemed essential for coordinated positioning of the capabilities, products and services of the local aerospace and defence sector as reputable partners in the global industry.

Key opportunities

The present main opportunities are in:

- Unlocking niche export markets and partnerships.
- Providing tailor-made solutions to selected export markets.
- Leveraging government and State Owned Companies' acquisitions and maintenance of defence-related products to expand local capability and boost local manufacturing, both by participating in offset programmes and building further on global supply value chains.
- Development of niche capabilities and technology programmes such as additive manufacturing and titanium metal powder manufacturing and processing.

Key constraints

The primary constraint is the difficulty of securing a sufficient pipeline of skilled personnel to absorb current knowledge and experience.

Other notable constraints in the aerospace and defence sector are as follows:

- Shortage of large development programmes to build the technology and skills pipeline and accelerate knowledge transfer between the knowledge generating entities (science councils, universities) and manufacturing industry (both local and global). This is also related to recent reductions in R&D spend, including technology demonstrators, and more general human capital development and retention.
- Limited participation of locally-owned companies in key strategic technological areas.
- A limited aerospace and defence industry support programme, including export support, compliance with international standards and skills development.
- Insufficient diversification into export markets based on product diversification (both civil and commercial).

Key Action Programmes

1. Development of a Titanium Production Capability Roadmap with the focus on downstream manufacturing technologies and products

Nature of the intervention

Acknowledging that the DST has established a Titanium Centre of Competence (TiCoC) working on a long term program of titanium powder beneficiation - as well as the fact that industry is also already using other traditional and new technologies - requires that **the dti** develops and prepares the local manufacturing industry to effectively exploit the current opportunities as well as future potential of Titanium production in South Africa. Through its Integrated Aerospace Programme (IDAP), t**he dti** has been instrumental in preparing and supporting the industry, human capital development and academia through various industrialisation projects.

Further interventions are necessary to:

- Identify the possible work streams relevant to the commercialisation of manufactured titanium products and the processes applicable in the aerospace and defence industry, whilst supporting the alignment of the industry with emergent commercialisation opportunities.
- Create an opportunity for the aerospace and defence industry to adopt relevant new materials processing technologies such as investment casting, laser shock peening, laser cladding, laser welding, laser hardening, friction stir welding and advanced machining.

The key emphasis is on ensuring that the industry adopts these advanced manufacturing technologies in the long run.

Economic rationale

- To position South Africa as a lead supply chain participant within the global titanium manufacturing industry, concentrating on aerospace and defence products and new technologies.

- To Increase the spill-over effects of these new technologies into related activities and adjacent industries such as medical, energy, automotive, chemical processing, marine, oil and gas.

Outcomes

- Evaluation of the industry`s ability to adopt these new technologies and use them in repair work and maintenance for the entire defence industry, including marine systems, thus ensuring its readiness to meet global supply chain requirements.
- Strengthened coordination between **the dti,** DST, research and development institutions (Science Councils and universities) and the Industry, both in support of titanium manufacturing and of South Africa's evolution towards a knowledge economy.
- In the long term, the aim is to locally produce niche titanium products and components for the global aerospace and defence industry, positioning South Africa as an established and reliable supplier base.

Key milestones

2014/15 Q2: Approval of the Industrialisation Roadmap.

2014/15 Q3: Development of a Titanium Production Capability Roadmap - other than using additive manufacturing - for the local aerospace and defence industry.

2014/15 Q4: Introduction of the Titanium Production Capability Roadmap to the relevant stakeholders, including industry.

Lead and supporting departments / agencies: the dti, IDAP, DST, CSIR

2. Development and evaluation of the Flagship Projects in mobilising coordinated resource support for the JASC programme of work

Nature of the intervention

The purpose of the flagship programmes is to facilitate technology and capability development through joint, large programmes. This approach is followed by a number of countries where new technology development is required, in conjunction with new capabilities and an ultimate increase in the competitiveness of the industry. The JASC initiated a flagship project in unmanned aircraft, with an associated development in navigation and control for unmanned aircraft.

The current flagship project is a multi-year project, requiring both increased interdepartmental participation in the selection and funding of flagships and increased project expenditure to drive renewal of the technological capability of the aerospace industry and deliver maximum benefits spin-off benefits across the industry.

Outcomes

- Accelerated technology development.
- Increased innovation networks, attributed to the broad participation in flagship projects.
- More effective leveraging of government funding.
- Broadening of platforms for commercial and civil applications.

Key Milestones

2014/2015 Q1: Progress Review of the first flagship project, with the aim of expanding both technology networks and industry participation.

2014/2015 Q3: Selection of a second flagship, supported by other government departments.

3. Broadening industry participation through a supplier development scheme offered by IDAP

Nature of the intervention

An incentive scheme aimed at ensuring the inclusion and integration of a representative supplier base which would otherwise not have had the opportunity to participate in the industry.

Economic rationale

In order for the industry to transform and broaden its supplier base, significant investment is required by the integrators to ensure that lower-tier suppliers are certified to meet the quality standards of the OEMs. This level of investment represents a barrier to entry for SMMEs and an obstacle to growth and production at the higher- tier suppliers to Airbus and Boeing.

Inclusion in the international aerospace industry value chain requires that lower-tier companies comply with the same stringent certification and quality standards as the South African integrators, which poses a considerable cost challenge to both the integrator and the SMME. To encourage local integrators to invest in broadening their supplier base, this incentive scheme proposes to make funding available based on the increase in annual turnover of the qualifying SMME – and increase which should be as a direct result of contracts placed by the integrator for aerospace component manufacture.

Participating SMMEs will be evaluated based on, but not limited to, their:

- BB-BEE status;
- Technological, organisational and business capabilities;
- Potential for sustainability and growth;
- Acceptance/identification by the integrators;

Outcomes

- A broader and more inclusive supplier base;
- Conformance of SMMEs with international standards;
- Inclusion of SMMEs in the economic activities of the aerospace industry.

Key Milestones

2014/2015 Q1:	Scope and design the range and quantum of the support mechanism based on a consultative identification of qualifying SMMEs by **the dti**, industry associations and system integrators.
2014/2015 Q4:	Evaluate the take-up and impact of the mechanism with a view to further development and fine-tuning and to ensure effective support and broadening of the BB-BEE supplier base in the aerospace sector.

Lead and supporting departments/agencies: **the dti**, DST, TLIU, IDAP

4. Advocacy and promotion of aerospace and defence products and capabilities in global markets

Nature of the intervention

Support the establishment of the following:

- An integrated web portal for the Aerospace and Defence Industry.
- A permanent Exhibition Centre at an appropriate location.
- A vibrant Export Council which will promote and champion the interest of local manufacturers in international markets and ensure an increase in aerospace and defence exports.

The aim of these support mechanisms is to retain and develop sovereign aerospace and defence capabilities whilst marketing these capabilities to the international defence community.

Economic rationale

The Aerospace and Defence industry contributes significantly to industrial growth, foreign revenue, local technical capability and employment generation, national security and improvement in national competitiveness. Its exports are gradually increasing and are expected to continue increasing in the future.

It is of great importance to support such an increase of exports by establishing an infrastructure that will deal solely with export promotion - In this instance, an Export Council and a Permanent Exhibition centre.

The Export Council is a body that will mainly assist members to become preferred exporters and gain and maintain export share. This will be achieved through effective promotional initiatives in international markets and underpinned by a Permanent Exhibition Centre at CAV which will showcase aerospace and defence products to foreign delegations, host product launches, and hold industry workshops, conferences and seminars.

Outcomes

- Establishment of an Export Council.
- Formation of the Permanent Exhibition Centre.

Key milestones

2014/15 Q1: Establishment of an Export Council.

2015/16 Q2: Feasibility Study for the formation of the Permanent Exhibition Centre.

Lead and supporting departments/agencies: the dti, CAV

5. Consolidation of Aerospace Industry Support Initiative (AISI) and National Aerospace Centre (NAC) to form an Integrated dti Aerospace Programme (IDAP)

Nature of the intervention

The objective is to integrate the functions and physical locations of AISI and NAC, in order to strengthen their contribution to the development of the aerospace and defence sector as defined by **dti** policy and guidelines on Centres of Excellence.

Economic Rationale

The South African aerospace and defence industry has followed a development path primarily aimed at developing indigenous products and technologies. This has resulted in the consolidation of a wide range of technological capabilities and the associated infrastructure required for complete vertical product integration. Competitive capabilities increase chances of entry into global markets and supply chains.

IDAP's major role in this regard is to provide an enabling platform, which includes:

- Supporting the implementation of the Aerospace Sector Development Strategy.
- Providing a range of specialist services that strengthen aerospace manufacturing activities - including skills development - and build up the global supply value chains already developed.
- Strengthening industry competitiveness and broadening economic participation to meet current and future market requirements by identifying and developing new capabilities.
- Strengthening the co-ordination of technological and skills development across the aerospace and defence industry as a whole.

Outcome

Amalgamated and deeper penetration of the industry support programme.

Key milestones

2014/15 Q4: Establishment of the IDAP in line with **the dti** strategic intent

Lead and supporting departments/agencies: the dti, CSIR, AISI, IDAP and NAC.

6. Building a competitive industry through advanced manufacturing, aerospace and defence cluster development

Nature of the intervention

- Integration of sub-tier suppliers of the local industry into the global supply chain by bringing aerospace and defence industry suppliers into close proximity with one another and co-locate them next to major system integrators and anchor partners.
- Promotion of local innovation, new business and exports in the aerospace and defence sector.

Economic Rationale

Aerospace and defence has continued to grow in revenue primarily in the export markets. In order to maintain and expand this export market, there is need to strengthen the potential for further growth by establishing a supplier development park.

The cluster should provide an aero-mechanical, advanced manufacturing, maintenance, repair and overhaul capability infrastructure for anchor tenants, as well as a range of large to medium enterprises attracted by the opportunity to do business related to the growth of the aerospace industry.

It is expected that the park will benefit local OEM suppliers of components, parts and tools, as well as hosting related service providers to develop further synergies and balanced applications. Other relevant industrial sectors likely to directly or indirectly benefit from the establishment of the cluster include tooling and machining, electro-technical, metals, chemicals and the like.

Outcome

The completion of the bulk utility, infrastructure and services and the finalisation of the uptake agreements will open the way for the construction of buildings by prospective tenants and industry investors.

Key Milestones

2014/2015 Q3: Conclusion of uptake agreements with prospective tenants and industry investors.

2014/2015 Q4: Completion of the prioritised core CAV landside bulk utility services and infrastructure, including water and sanitation, roads and storm-water drainage, electricity and land management.

Lead and supporting departments / agencies: the dti, and CAV

The South African software industry

The SA software industry is broad and incorporates a number of areas in which South Africa has niche, globally competitive capabilities. These are mainly centred on customised software-hardware development.

In order to help create a basis for software skills and capability development the ICT R&D and Innovation Roadmap was developed and approved by Cabinet in 2012. The Roadmap identifies several vertical ICT market opportunities which can be complemented by the software development industry programme in the areas of big data and analytics and industry applications (including advanced manufacturing).

Advanced software development capability will be an important prerequisite to support these initiatives. In addition, the designation of South Africa as host for the majority part of the Square Kilometre Array has increased the importance of areas such as high speed data networks to Europe and large data storage and handling.

On the other hand South Africa's commercial software development industry is relatively young and fragile. Its future viability has not been helped by decisions taken by sectors such as banking, insurance and telecommunications to outsource their software development projects and services to countries like India and China. This has the potential to destroy thousands of existing jobs and to negatively impact on SA's future ability to develop software locally.

Key opportunities

Upgrading South Africa's ability to produce computer software is an important strategic priority. If software developers in South Africa are able to successfully compete globally, there will be both significant potential to service the local market and to grow exports of software products and services to destinations such as Europe, North America, Asia, etc.

While price and other factors may be important, the primary reason for a customer to select a specific supplier is the ability of that supplier to deliver, on-time and within budget, a high quality software product that meets all the functional requirements. Competition in the global software development industry is largely focused on these three issues. If these are addressed, this would lead to creation of jobs and meeting local demand for software products.

Key constraints

- The high cost of funding for certification and the time taken to complete the certification process.
- Limited awareness in the domestic market of the importance of certification and low levels of technical know-how on certification.
- Limited availability of information on software development companies and their capabilities in both local and international markets.
- Many software developers are not export-ready.
- Scepticism in the industry towards the effectiveness of the role that government can play in supporting and developing the industry.

IPAP intends to contribute to the sector's recovery and growth through the recently launched Software Development Process Improvement Programme. This is designed to improve the quality of South African software through process improvement training using methods such as the Capability Maturity Model Integration (CMMI) and Team Software Process (TSP); and by better aligning product development with domestic and global requirements.

A Memorandum of Agreement has been signed with the appointed implementing agency and funds have been secured through the Employment Creation Fund. Agreement has been reached on the selection criteria for participating entities within regional IT clusters and an Operations Manual and curriculum have been developed for use in the initial pilot project.

Key Action Programme

1. Software Development Process Improvement Programme

Nature of intervention

To improve the quality of South African software through process improvement training using Capability Maturity Model Integration (CMMI) and Team Software Process (TSP) methods and through alignment of product development with domestic and global requirements. This will include widening participation of unemployed graduates as part of a skills development and capacity building programme for better performance.

Economic rationale

Raise awareness of the importance of quality systems certification, improve the quality of South African software companies and support the take-up of internationally recognised quality system certification for software developers in South Africa.

Outcomes

This initiative will enhance the competitiveness of local SA software companies and create a significant breakthrough in market access for SA software developers. It will also result in large-scale creation of high-skilled employment opportunities.

Milestones

2014/2015 Q1: Agreement on alignment of the SA Electro-technical Export Council mandate, EMIA and the Joint Action Group for the Software Industry to support export-ready companies. Performance Review of the first four software development entities; refinements made to Operations Manual and training curriculum.

2014/2015 Q2: Two additional software development entities identified and participating in the process improvement programme.

2014/2015 Q3: Establishment of an Advisory Council, comprised of government and private sector representatives, to oversee the roll-out.

2015/2016 Q1: Further review of performance of all software development entities; refinements to Operations Manual & training curriculum; Add four more software development entities as part of the roll-out.

Lead Departments: the dti and JCSE

Public Residential Electrification Programme for low cost housing

Sector profile

The Integrated National Electrification programme (INEP) is presently implemented by the Department of Energy in partnership with Eskom and the South African Local Government Association (SALGA).

In the financial year 2012/13 an amount of R2.9 billion was allocated for electrification; and, as of January 2012, Eskom and the municipalities had completed 220,000 connections. At the same point in time, however, some 3.4 million households nationally remained without electricity, while INEP in the rural areas had a 75% backlog. The Programme in urban areas accounted for only a fraction of the backlog - mainly in the 177 municipalities licensed for distribution – with informal settlements accounting for the remaining 25% backlog.

The Eskom Localisation Plan has three priority focus areas, with electrification located under its Projects and New Build Programme. The most recent estimate suggests that an additional 1.6m households will be connected to the grid over the next five years, opening up a strong space for the designation of residential electricity metering, including smart pre- and post-payment meters.

Key opportunities

The present main opportunities are in:

- Support of local manufacturing of electrification components or products, (such as circuit breakers, surge arrestors, switch gears, earthing, connections, mv motors etc.) by leveraging on government spending associated with the DoE's Electrification Master Plan - which intends electrifying 97% of households by 2025 – in order to develop sustainable sector productive capabilities.

Key Action Programme

1. Localisation of electrification components through designation as per amended Preferential Procurement Policy Framework Act (PPPFA)

Nature of the intervention

The localisation of electrification components comes close to meeting the procurement requirements of ESKOM and municipalities as it includes a number of major components that are an integral part of the electrification programme and gives practical effect to the designation of these components for use in the electrification or low voltage reticulation system. This will lead to the creation of a sustainable demand market for local manufacture of electrification components/products.

Economic rationale

- With the spending envisaged by government over the upcoming 10-year period, the creation of a sustainable components and product manufacturing industry is a realistic prospect.

Outcomes

- Identification and stimulation of local content for the entire or parts electrification or reticulation low voltage system;
- Strengthening of the local electro technical manufacturing industry

Key milestones

2014/15 Q2: Comprehensive list of identified products/components intended for use in the government Housing Electrification Programme.

2014/15 Q4: Designation of products for the electrification system as identified above.

Lead and supporting departments / agencies: the dti, DOE, EDD, PICC, ESKOM, SALGA, AME.

Electronics industry support

Leveraging on aggregate demand for electro-technical manufacturing

Sector profile

South Africa has world-class engineering facilities, an internationally accepted system of standards and testing, and a base of capacity and capabilities including skills that can be optimised in the electronics industry. The Electronic sector (excluding software) contributes in the region of 12.5% to South African GDP.

Supported by **the dti** and IDC, private investors have built capacity and capability to produce electronic products. This has been in the form of both electronics and contract manufacturing facilities that produce products such as set-top boxes (already designated for local procurement), electrical and telecoms cables (designated), televisions (rebate system), residential electricity meters (designated), electromagnetic systems, personal computers and laptop assembly.

Domestic manufacturers have demonstrated capability to support government initiatives such as digital broadcasting migration, broadband roll-out, e-learning platforms and the state-led electrification programme. It is important to leverage these programmes for the benefit of the local industry as they raise aggregate demand for various types of products with mostly similar production processes. Local delivery of these products will contribute to job creation and general economic growth and development.

Key Opportunities

The key opportunities identified for this industry are as follows:

- To leverage public procurement in support of localisation;
- To develop local skills and technology; and
- To attract foreign direct investment into the industry.
- Promoting exports and participation of the industry in large continental strategic projects.

Key Constraints

- High volumes of imported devices and components;
- High cost of technology and infrastructure investments (e.g. PC board populating machines);
- Lack of a developed electronics manufacturing support strategy;
- Inability to consider tariffs for computer-related products (WTO agreement);
- Poor regulatory environment, with influx of illegal imports;
- Poor compliance with standards and industry-compulsory specifications.

Key Action Programme

1. To develop an action plan to support broadband roll-out

Nature of the intervention

The objective of this work will be to consider/identify industrial policy interventions that can support and stimulate electronics manufacturing and assembly arising from the broad band roll-out programme. Building on the designation of STBs, Cables, and residential electrical meters, this work will seek to further assess existing standards, compulsory specifications, incentives and industrial financing for products that are required to support domestic broadband roll-out and other public sector initiatives.

Economic Rational of the Intervention

To develop policy interventions in the industry that can revitalise and scale up the local electronics industry as a whole, leveraging on the potential of both broadband and e-learning platforms to raise aggregate demand.

Outcomes

- Strengthened capacity and capabilities in electronics manufacturing.
- Improved competitiveness of local industry.
- Increased employment.

Key Milestones

2014/2015 Q2: Develop an Action Plan to support broadband roll-out, inclusive of tariff policy, standards, industrial incentives and export promotion.

2014/2015 Q4: Develop an approach that supports both electronics and contract manufacturing.

Lead and Supporting Departments/Agencies: the dti, IDC, DoC, EDD, PICC, ITAC, SABS and SARS.

White goods

Sector Profile

The domestic White Goods Industry is segmented between large and small appliances. The large appliance manufacturers account for 80% of domestic market share. Until recently, the major manufactures were Defy Appliances and Whirlpool; but, as noted below, they have recently been joined by three major new entrants.

Domestic manufacturing has traditionally focussed on refrigeration and cooking appliances, which represent 63% of sales. The industry value chain is made up of three tiers of firms, with manufacturers of large and small appliances at the top. The value chain is completed by suppliers of niche components, standardised items, fabricated parts and raw materials.

Currently, employment is estimated to be at about 3,000 employees, mainly split between the two major manufactures. Overall, there has been steady growth in the white goods sector, driven predominantly by middle-income households and the public electrification programme for low-cost households. It is predicted that potential future growth lies with low-income household purchases of stoves, microwaves and hotplates to satisfy demand at the lower end of the product range.

Exports currently account for about 5% of goods produced by South African companies. Some industry players supply large retailers, which have international operations throughout Africa. As a result, products are often shipped directly to retail outlets in these areas. Foreign direct investment in the form of mergers bodes well for the development of the South African white goods industry.

Market Development

There has been considerable market development within the white goods sector that could aid government in reaching its objectives of increased employment, particularly within the manufacturing space. With new entrants LG Electronics and HiSense already having established a presence – and with Samsung on the point of setting up a local manufacturing facility, it is clear that the global players are seeing South Africa as an attractive market proposition. This creates an opportunity for government to assist with the facilitation of exports into other markets, particularly since there is an appetite on the part of these companies to aggressively grow their exports into the African regional market.

Key Opportunities

Increasing exports - particularly into the SADC region and other regional markets - presents a clear opportunity to grow the local white goods manufacturing sector, overcoming the constraints of a relatively small domestic market. This will require:

- Manufacturing lower-end products for Africa - where electricity supply and transport remain serious challenges - e.g. production of dual (gas and electricity) appliances;
- To position S.A as a viable platform for expanded multinational exports into Africa, taking advantage of increasing African middle class demand for higher-end products.
- To review duties on components and products and implement a rebate scheme for manufacturers and their local suppliers.

Key Constraints

Constraints affecting the competitiveness and, therefore, the growth of the industry include:

- High volume of imports;
- Input costs, specifically import parity pricing of steel and aluminium;
- Small size of the local market; and
- Cost of capital to finance technology and capital upgrade.

Key Action Programmes

1. Development of a White Goods Export Strategy

Nature of Intervention:

The development of a well-researched and structured White Goods Export Strategy to enlarge South Africa's footprint in both international and local/regional markets; in particular leveraging SA's competitive advantage in terms of proximity to Southern Africa and logistical and transport capabilities. This export push will be supported by various trade concessions related to SA's membership in regional trade agreements with the SACU and SADC groupings.

Economic rationale

Promotion of industrial capacity, technological infrastructure, energy efficiency, lower production costs, access to global supply chains, economic growth and employment creation.

Outcomes

2014/15 – Q3: White Goods Export Strategy developed.

2. Facilitate technological upgrading within the Industry through MCEP financial elements

The programme will seek to ensure adequate provision of industrial financing support to the industry, including the working capital to ensure plant recapitalisation and technological upgrading. Targeted funding streams will be aimed at:

- Increased productivity, product diversification and industry competitiveness;
- Expansion of production and export volumes;
- Creation and retention of new sustainable jobs.

Key milestones

2014/15 Q4: Applications for financing considered; recapitalisation process started.

Lead Departments/agencies: the dti and ITAC, Electro-Technical Export Council, IDC and SARS**.**

3. Facilitate a favourable tariff regime and introduce a rebate mechanism for local manufacturers

The programme will seek to ensure that there are no tariff duties on input components manufactured locally, in order to assist in reducing final cost-of-product and improve international competitiveness. This will further assist in:

- Increasing export volumes and finding new markets for South African products;
- Enhancing the access of both local and SA-located global industry players to the African market;
- Reducing the negative impact of cheap imported products on local employment;
- Applying a reasonable level of protection for domestic producers; and
- Increasing overall competitiveness within the white goods industry.

Key milestones

- 2014/15 Q4: Finalise the review of tariffs for the white goods industry.

Lead Departments/agencies: the dti, ITAC, EDD, Electro-technical Export Council, IDC and SARS**.**

ABBREVIATIONS AND ACRONYMS

ABC	Aerial Bundled Conductor
AECMSA	Association of Electric Cable Manufacturers of South Africa
AIDC	Automotive Industry Development Centre
AIDS	Acquired Immune Deficiency Syndrome
AIS	Automotive Investment Scheme
APDP	Automotive Production and Development Programme
API	Active Pharmaceutical Ingredients
ART	Antiretroviral Treatment
ARV	Anti-retroviral
AsgiSA- EC	Accelerated and Shared Growth Initiative for South Africa - Eastern Cape
ATF	Aluminium Trifluoride
B-BBEE	Broad Based Black Economic Empowerment
BNDES	Brazil's Banco Nacional de Desenvolvimento Econômico e Social
BPS	Business Process Services
BTX	Benzene, Toluene and Xylene
CAV	Centurion Aerospace Village
CDM	Clean Development Mechanism
CEF	Central Energy Fund
CIACM	Competitiveness Improvement of Automotive Component Manufactures
CKD	Completely Knock Down
CMMI	Capability Maturity Model Integration
CMT	Cut, Make and Trim
COC	Centre of Competence
CSA	Corrugated Seamless Aluminium
CRM	Customer Relations Management
CSDP	Competitive Supplier Development Programme
CSID	Corporate Strategies and Industrial Development
CSIR	Council for Scientific and Industrial Research
CSP	Customised Sector Programme
CTS	Concentrated Thermal Solar
CTCP	Clothing and Textiles Competitiveness Programme
CTLF	Clothing Textiles, Leather and Footwear
DAC	Department of Arts and Culture
DAFF	Department of Agriculture, Forestry and Fisheries
DBSA	Development Bank of Southern Africa
DFIs	Development Finance Institutions
DG	Director General
DIRCO	Department of International Relations and Cooperation
DMR	Department of Mineral Resources
DoC	Department of Communications
DOD	Department of Defence
DoE	Department of Energy
DoH	Department of Health
DHET	Department of Higher Education and Training
DoJ	Department of Justice
DoL	Department of Labour
DoT	Department of Transport

DPE	Department of Public Enterprises
DPW	Department of Public Works
DST	Department of Science and Technology
the dti	The Department of Trade and Industry
DTT	Digital Terrestrial Television
DWEA	Department of Water and Environmental Affairs
EC	Eastern Cape
EE	Energy Efficiency
EEC	Ekurhuleni East College
EDD	Economic Development Department
EIA	Environment Impact Assessment
EIP	Enterprise Investment Programme
EMIA	Export Marketing and Investment Assistance
EPI	Extended Programme of Immunisation
ERA	Enterprise Reference Architecture
ESKOM	Electricity Supply Commission
EU	European Union
EV	Electric Vehicle
FET	Further Education and Training
FIETA	Forest Industries Education and Training Authority
FPM	Fibre Processing and Manufacturing
FPSO	Floating Production Storage & Offloading
FRIDGE	Fund for Research into Industrial Development Growth and Equity
FSA	Food Safety Agency
FSA	Forestry South Africa
FTPP	Forestry, Timber, Pulp and Paper
GDP	Gross Domestic Product
GHS	Globally Harmonised System
GFCF	Gross Fixed Capital Formation
GW	Gigawatt
GWH	Gigawatt Hour
ha	hectares
HF	Hydrogen Fluoride
HIV	Human Immune Virus
HRD	Human Resource Development
HS	Harmonised System
ICT	Information Communication Technologies
IDAP	Integrated **dti** Aerospace Programme
IDC	Industrial Development Corporation
IDZ	Industrial Development Zone
IEE	Industrial Energy Efficiency
IFPI	International Federation of the Phonographic Industry
IPAP	Industrial Policy Action Plan
IRP	Integrated Resource Plan
ITAC	International Trade Administration Commission
ITED	International Trade and Economic Development
JASC	Joint Aerospace Steering Committee
JV	Joint Venture
KAP	Key Action Programme
KDB	Korean Development Bank

KZN	KwaZulu-Natal
LSOH	Low Smoke Zero Halogen
m	metres
MACC	Mobilisation, Alignment, Capacity Building and Cooperation
MCEP	Manufacturing Competitiveness Enhancement Programme
MerSETA	Manufacturing, Engineering and Related Services SETA
MHCV	Medium and Heavy Commercial Vehicles
MIDP	Motor Industry Development Programme
MNC	Multi-National Corporations
MOA	Memorandum of Agreement
MoU	Memorandum of Understanding
MSTF	Medium term Strategic Framework
MTBPS	Medium Term Budget Policy Statement
MTBS	Medium Term Budget Statement
MTIDC	Malawi-Tanzania Industrial Development Cluster
MW	Megawatt
NAAMSA	National Association of Automobile Manufacturers of South Africa
NADP	National Artisan Development Programme
NAMC	National Agricultural Marketing Council
NQF	National Qualification Framework
NCSDP	National Craft Sector Development Programme
NCPC	National Cleaner Production Centre
NDT	National Department of Tourism
NECSA	South African Nuclear Energy Corporation
NEDLAC	National Economic Development and Labour Council
NEF	National Empowerment Fund
NERSA	National Energy Regulator of South Africa
NFVF	National Film and Video Foundation
NGP	New Growth Path
NIPF	National Industrial Policy Framework
NIPP	National Industrial Participation Programme
NLA	National Laboratory Association
NMISA	National Metrology Institute of South Africa
NNR	National Nuclear Regulator
NPA	National Prosecuting Authority
NRCS	National Regulator for Compulsory Specification
NSDS	National Skills Development Strategy
NSF	National Skills Fund
NSSS	Nuclear Steam Supply System
NT	National Treasury
NTB	Non-Tariff Barriers
NFTN	National Foundry Technology Network
NTI	National Tooling Initiative
NTP	Nuclear Technology Products
OEMs	Original Equipment Manufactures
PFMA	Public Finance Management Act
PGM	Platinum Group Minerals
PGWC	Provincial Government of the Western Cape
PI	Production Incentive
PILC	Paper Insulated Lead Covered

PPA	Power Purchase Agreement
PPP	Public Private Partnership
PPPFA	Preferential Procurement Policy Framework Act
PRASA	Passenger Rail Agency of South Africa
PSA	Proudly South African
PV	Photovoltaic
REFIT	Renewable Energy Feed in Tariff
REIPP	Renewable Energy Independent Power Producers
REIPPPP	Renewable Energy Independent Power Producer Procurement Programme
RFP	Request for Proposals
RIBS	Rigid Inflatable Boats
RPO	Radiation Protection Officers
R&D	Research and Development
RSDIP	Regional Spatial Development Initiatives Programme
QCTO	Quality Council for Trades and Occupations
SA	South Africa
SaaS	Software as a Service
SAA	South African Airways
SABC	South African Broadcasting Corporation
SABS	South African Bureau of Standards
SADC	Southern African Development Community
SAFVCA	South African Fruit and Vegetable Canning Association
SAHC	South African Handmade Collection
SANS	South African National Standards
SANAS	South African National Accreditation System
SAOGA	South African Oil and Gas Alliance
SAOSO	South African Organics Sector Organisation
SAPS	South African Police Services
SARS	South African Revenue Services
SARi	South African Renewables Initiative
SAT	South African Tourism
SATS	South African Technical Standard
SDI	Spatial Development Initiatives
SDP	Supplier Development Plans
SANAS	South African National Accreditation System
SEDA	Small Enterprise Development Agency
SETA	Skills Education and Training Authorities
SEZ	Special Economic Zones
SKD	Semi-Knock Down
SME	Small and Medium Enterprises
SMME	Small Medium and Micro Enterprises
SOCs	State-Owned Companies
SOC-ATD-TT	State-Owned Companies Artisan Development Task Team
SOEs	State-Owned Enterprises
SPS	Sanitary and Phyto-sanitary Standards
SQAM	Standards, Quality Assurance and Metrology
SSAS	Sector Specific Assistant Scheme
SSP	Sector Skills Plans
STB	Set Top Box

SWH	Solar Water Heaters
SWOT	Strength, Weakness, Opportunity and Threats
TBT	Technical Barriers to Trade
TEO	The Enterprise Organisation
T/G	Turbine Generator
TISA	Trade and Investment South Africa
TPA	Tonnes Per Annum
TNPA	Transnet National Ports Authority
TSP	Team Software Process
TV	Television
TVC	Technology Venture Capital
UNIDO	United Nations Industrial Development Organisation
UNFCCC	United Nations Framework Convention on Climate Change
US	United States
VAT	Value Added Tax
WC	Western Cape
WTO	World Trade Organisation

NOTES:

Newly launched Dube TradeZone 2 attracts R1.8-billion in early investment

Dube TradePort Corporation (DPTC) has officially launched Dube TradeZone 2, the second phase of the highly successful industrial precinct and special economic zone adjacent to the King Shaka International Airport. This has, to date, attracted a total of R4.6-billion in private sector investment and created more than 5,000 permanent jobs.
The event, which was attended by national and provincial government, together with regional business leaders, included a ribbon cutting ceremony followed by a preview of two factories worth over R180-million, which are currently under construction within the precinct.

MEC for the Department of Economic Development, Tourism and Environmental Affairs (EDTEA), Mr. Siboniso Duma, welcomed the investment within the context of the celebrations of 30 years of Freedom and Democracy. He noted the establishment of Special Economic Zones as one of the achievements of a democratic government. He cited this investment as a clear indication that SEZs are instruments for job creation and economic development.

"As government we are focusing on SEZ for a good reason. They are designed for specific developmental purposes, to develop export-orientated industries, attract foreign direct investment and technology transfer and achieve the generation of employment opportunities.
The SEZs stand to be an effective instrument to resolve the disturbing levels of inequality, poverty and unemployment, which are strongly marked by spatial, racial, class and gender factors.
In addition to job creation, SEZs are broadening the municipal revenue collection base to improve the quality of life in the municipal areas, as well as the quality of municipal services. This makes SEZs one of the key instruments for municipal economic growth and development." MEC Duma explained.

Speaking at the launch, DTPC board chair, Mr. Mpumelelo Zikalala, said that, despite the constrained economic environment over the past two years, DTPC has secured seven private sector investors for
Dube TradeZone 2.

Four of these investors have begun constructing their facilities. The total private sector investment value secured in Dube TradeZone 2 to date amounts to R1.8 billion and is expected to create 600 jobs within the next five years.

Dube TradeZone 2 will target investors in the manufacturing and assembly, logistics and automotive sectors whilst facilitating the planned expansion of a number of phase one-based enterprises.

The launch of the second phase of the TradeZone follows the successful implementation of Dube TradeZone 1, which is fully tenanted by 50 investors, including international companies such as Samsung, Mahindra, DHL, Chem Energy and PepsiCo-Futurelife.

To date, the 26-hectare TradeZone 1 has attracted more than R2.8 billion in private sector investment from enterprises focused on air-related logistics, distribution and light manufacturing. It includes the Dube TradeHouse, a dedicated facility for freight forwarders and shippers with airside access via an overhead conveyor airbridge to the adjacent, state-of-the-art Dube Cargo Terminal.

Dube TradeZone 1 is home to notable exporters including Samsung, Yangtze Optics Africa (YOA), LM Diapers, Tufbag, Futurelife and Conlog who service the sub-Saharan African market as well as markets in Asia, Europe, and the United States. In 2023/24, Dube TradePort tenants exported goods worth R610-million.

Dube TradeZone 2, opens an additional 45 hectares of industrial land for development and brings to market another 23 fully serviced sites, which range in size from 3 000m² to 57 000m². Dube TradeZone 2 will include three Dube TradePort-owned warehouses, one of which will accommodate medium-sized businesses enabling the expansion of small businesses located in the mini-factories.

The two factories that were visited by business leaders and the media include the R166-million Yangtze Optical Africa Cable plant and a R17.5-million development by HRMP, a 100% Black, South African owned logistics company that specializes in the warehousing and distribution of graphite electrodes, this new facility was funded by Ithala Development Finance.

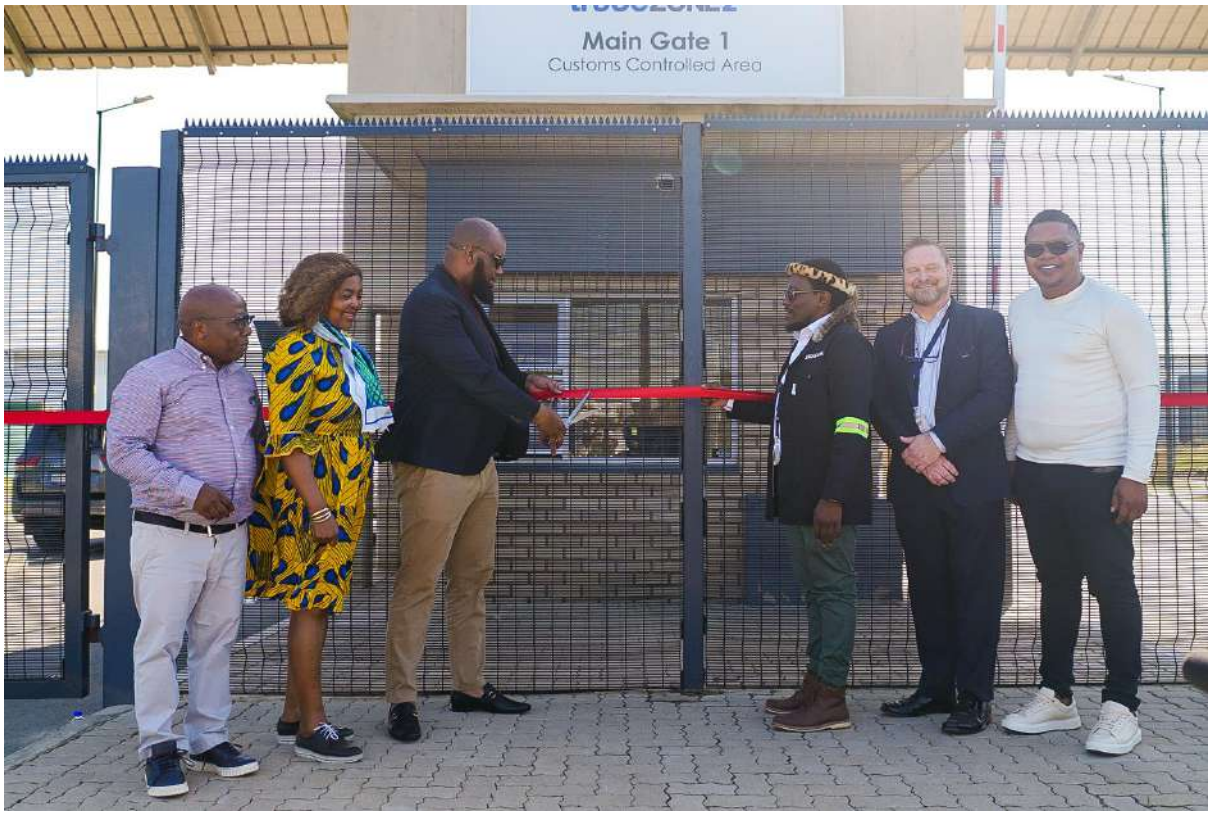
Mr, Sihle Ngcamu ACEO: Trade and Investment KZN, welcomed further foreign investment by Yangtze Optical Africa Cable which is already producing optical fibre cables and home solution cables for the local, Zambian, Namibian and Botswanan telecommunications markets at its facility in TradeZone 1.

This latest investment is expected to deliver a further 250 jobs over the next five years.

Ends.

Images:

From left to right:
Poulos Ngcobo - Deputy Board Chairperson Dube TradePort
Pearl Bhengu - iThala Development Finance Corporation
Sboniso Duma - KZN MEC for Economic Development, Tourism and Environmental Affairs
Mpumelelo Zikalala - Board Chairperson Dube TradePort
Hamish Erskine - CEO of Dube TradePort
Khanyisani Shandu - Board Chairperson Trade and Investment KZN



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Policy On The Development of Special Economic Zones In South Africa (2012)

the dti
Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

POLICY ON THE DEVELOPMENT OF SPECIAL ECONOMIC ZONES IN SOUTH AFRICA

- 2012 -

Acronyms

AIS:	Automotive Investment Scheme
ASGISA:	Accelerated Shared Growth Initiative of South Africa
CIP:	Critical Infrastructure Programme
DFIs:	Development Finance Institutions
EMIA:	Export Marketing and Investment Assistance
EPZs:	Export Processing Zones
FTZs:	Free Trade Zones
GEAR:	Growth, Employment and Redistribution
IDZ:	Industrial Development Zone
IMS:	Integrated Manufacturing Strategy
IPAP:	Industrial Policy Action Plan
ISRDP:	Integrated Sustainable Rural Development Programme
MERS:	Microeconomic Reform Strategy
NES:	National Export Strategy
NGP:	National Growth Path
NIF:	National Investment Framework
NIPF:	National Industrial Policy Framework
NSDP:	National Spatial Development Perspective
SEZs:	Special Economic Zones
SSAS:	Sector Specific Assistance Scheme
URP:	Urban Renewal Programme

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The general public, the business fraternity, organised labour, researchers and specialists in the field of special economic zones who made efforts to provide invaluable contributions towards this work.

Foreword by the Minister of Trade and Industry

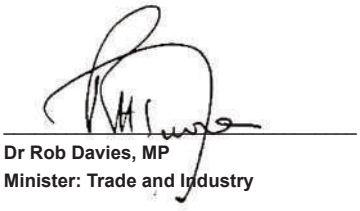
In line with the National Development Plan, Industrial Policy Action Plan and the New Growth Path, the Department of Trade and Industry (**the dti**) aims to continue fostering its efforts to create employment and economic growth by establishing a strong industrial base in South Africa.

The Special Economic Zones (SEZs) programme is one of the most critical instruments that can be used to advance government's strategic objectives of industrialisation, regional development, export promotion and job creation. Moreover, the programme can assist in improving the attractiveness of South Africa as a destination for foreign direct investment.

With the introduction of a much broader SEZ programme, more areas of strategic economic potential can be leveraged to attract foreign direct investment. The most pertinent outcome envisaged by the SEZ programme is the expansion of the manufacturing sector and the creation of additional industrial hubs to regionally diversify the national industrial base.

We are confident that the new SEZ Policy will be of benefit to industrialisation and significant to government for achieving its programmes' goals of economic growth, development and employment creation.

I wish to thank all those, whose hard work has contributed to the challenging task of ensuring and securing the progress registered over time particularly for the development of the SEZ policy. Most importantly, I encourage all concerned to redouble their efforts and continue to work together until the realisation of the country's industrial development agenda.



Dr Rob Davies, MP
Minister: Trade and Industry

Executive Summary

A Special Economic Zone (SEZ) is defined as “a geographically designated area of a country set aside for specifically targeted economic activities, which are then supported through special arrangements (which may include laws) and support systems to promote industrial development”. The SEZ programme is a tool that is used by many economies to promote trade, economic growth and industrialisation.

In an effort to reposition itself in the world economy, the South African government established the Industrial Development Zone Programme (IDZ) in 2000. The programme’s main focus was to attract foreign direct investment and export of value-added commodities. The main limitation of the programme was that the IDZs could only be designated adjacent to a sea port or international airport, and that excluded other regions in the country which had industrial potential but did not meet the IDZ criteria. This limitation has provided the rationale for a more inclusive industrial facilitation model in the form of the Special Economic Zone programme which will utilise a wider range of instruments.

Rationale for the Review of the Industrial Development Zone Programme

The review of the IDZ programme, that began in 2007, was brought about by the developments in national economic policies and strategies such as the Industrial Policy Framework and the New Growth Path; as well as developments in the global economic environment such as the formation of BRICS. The achievements of the existing IDZs are acknowledged, however, the government has felt that more could be achieved if the challenges identified within the existing IDZs could effectively be addressed. Challenges such as, lack of coordinated planning arrangements; insufficient guidance related to governance arrangements; dependence on government funding; lack of targeted investment promotion measures; insufficient marketing and inadequate coordination across government agencies have been identified as the key constraints to the success of the programme.

Importance of Special Economic Zones in South Africa

The SEZ Policy is being introduced to provide a clear policy framework with respect to the development, operations and management of SEZs including addressing challenges of the current IDZ programme. The purpose of the SEZ programme therefore is to:

- expand the strategic focus to cover diverse regional development needs and contexts, and address the design deficiencies of the IDZ Programme
- provide a clear, predictable and systemic planning framework for the development of a wider array of SEZs to support industrial policy objectives, National Development Plan (NDP) and the New Growth Path (NGP)
- clarify and strengthen governance arrangements; expand the range and quality of support measures beyond provision of infrastructure ; and
- provide for predictable financing arrangements that enable long-term planning.

Implementation of the SEZ Programme

The implementation of the SEZ programme will be carried out in conjunction with other relevant departments and agencies. The SEZ programme aims to provide comprehensive and coherent marketing, capacity development and skills development strategies, sustainable infrastructure development, integrated logistics systems, technology, research and developmental measures that promote sustainable technological innovation and improved quality and productive programmes.

SEZs are therefore strategic and effective instruments for the achievement of national and regional industrial development policy objectives. As such they will require coherent and coordinated cooperation from various stakeholders.

Section 1: Background and Context

1.1 Introduction

1.1.1 South Africa today is confronted with serious socio-economic challenges including subdued economic growth, high levels of unemployment, income inequality and abject poverty as well as spatial development challenges and regional disparities. This situation calls for urgent policy initiatives that will help propel the country into a higher growth trajectory and improve the livelihoods of ordinary citizens.

1.1.2 In response to these challenges, the South African government has brought forward policy proposals including the National Industrial Policy Framework (NIPF), the New Growth Path (NGP) and the National Development Plan (NDP) that advocate for an industrialisation path characterised by broad-based participation of the previously marginalised citizens and regions. The proposed creation of a regionally diverse industrial economy through the creation of new industrial hubs, in addition to the existing three major economic hubs of Gauteng, eThekwini-Pietermaritzburg and the Cape Peninsula; is an important component of the government's efforts to promote balanced Industrial development and to build on the full potential of all regions.

1.1.3 Development trends in Europe and Asia provide valuable lessons in terms of the long term benefits of industrialization and a strong manufacturing base. The lessons suggest strengthening and expanding the manufacturing industry as an anchor for long-term economic prosperity can lead to economic growth and development and create the much needed jobs – a path that South Africa must pursue to address its socio-economic challenges.

1.1.4 There is no single solution to all the country's economic problems. Special Economic Zones, as proposed in this policy, are just one of many instruments at the country's disposal. The SEZs are, however, an important tool for industrial and economic development. If well used and managed they can contribute to accelerating industrial development through facilitating growth oriented South African companies, attracting foreign direct investment, enhancing strategic industrial capabilities and increasing the level of exports. This in turn will contribute to general economic growth, the creation of high quality and sustainable jobs, and balanced regional development.

1.2 Purpose

1.2.1 This paper sets out the policy of the Department of Trade and Industry on Special Economic Zones against the background of the progress of the existing Industrial Development Zones (IDZs), the challenges encountered and the rationale for the policy shift from IDZs to SEZs within the framework of the National Industrial Policy Framework, the National Development Plan and the New Growth Path. Furthermore the key policy proposals and related actions are discussed.

1.3 Situational Analysis

1.3.1 Due to the economic development challenges that emanated from the apartheid system, the new democratic government after 1994 was faced with the challenge of raising the levels of domestic and foreign direct investments in order to accelerate growth, employment and re-integration to the global economy. Towards this end, in 2000 the government introduced the concept of Industrial Development Zones (IDZ). Four IDZs were designated, namely Coega (2001), OR Tambo International Airport (2002), East London (2002) and Richards Bay (2002). Only three are operational and all are located along the eastern coastal belt.

1.3.2 From 2002 to 2012, a total of 42 investors are on site and operational in the IDZs with more than R3.0 billion investments generated and approximately 5169 direct jobs created. This is below expectations; however jobs created through backward and forward linkages which could be considerable were not estimated in this report.

Coega IDZ

- The Coega IDZ was designated in 2001, covers a land area of 11 500ha and is wholly owned by the Eastern Cape Province through the Eastern Cape Development Corporation (ECDC).
- The Coega IDZ is operated by the Coega Development Corporation (Pty) Ltd.
- The IDZ has cumulatively received R4.4 billion from **the dti** and R1.5billion from the provincial government by the end of the 2012/13 financial year.
- Coega IDZ has 20 on site investors worth R1.13bn and has created 3778 direct jobs (excluding construction jobs).

East London IDZ

- The East London IDZ (ELIDZ) was designated in 2002 covering a land area of 420ha. It is operated by the East London IDZ (Pty) Ltd which is co-owned by the Eastern Cape Province (76% shareholding) through the Eastern Cape Development Corporation and the Buffalo City Municipality (24%).
- The ELIDZ has cumulatively received R1.4 billion from **the dti** and R1.3 billion from the Eastern Cape Province up to the end of the 2012/13 financial year.
- The achievements of the ELIDZ include 21 on-site investors with investments estimated at R1.1 billion and an estimated total of 1179 direct jobs (excluding construction jobs) created.
- The automotive sector is the most developed in the IDZ and constitute about 90% of all economic activities.

Richards Bay IDZ

- The Richards Bay IDZ was designated in 2002. It covers a land area of 350ha and is operated by the Richards Bay IDZ (Pty) Ltd.
- It is 100% owned by the KwaZulu-Natal Provincial Government. The Richards Bay IDZ has cumulatively received R331.14 million from **the dti** and R393.2 million from the province as at the end of the 2012/13 financial year.
- Prioritised industrial sectors in the IDZ include aluminium, furniture, titanium, dry dock (ship repair), and the synthetic wood cluster.
- There is currently one investor on site with an investment value of R800m and approximately 180 direct jobs have been created.

Section 2: Problem Statement On The Industrial Development Zones Programme

2.1 The modest performance of the IDZ programme can be attributed to a number of factors:

2.1.1 The lack of IDZ specific incentives (with the exception of Customs Controlled Areas that are yet to be rolled out and higher 12i Tax Allowance) made the IDZs less attractive as investment destinations, particularly for foreign direct investment.

2.1.2 Ad Hoc funding arrangements: The funding arrangements for IDZs made them rely on a single source of funding that is on-budget funding through the National Treasury. The current model does not provide flexibility to cover the cost of new unexpected projects establishing on the zones. This is aggravated by the fact that the zones are in many cases building both generic and customised top structures for new investors and renting them back to investors in an attempt to raise revenue. Furthermore, due to competing needs the government funding is always inadequate to satisfy the infrastructure development needs of the IDZs. The current funding arrangements make it impossible to plan for the long term. In addition, the current funding model does not provide a role for the Development Finance Institutions (DFIs) and private sector funding, thus making funding arrangements very inflexible and somewhat inadequate.

2.1.3 Lack of targeted investment promotion: The Marketing of IDZs was insufficient without clear roles designated for the national marketing agencies and the IDZs themselves which resulted in poor performance in attracting foreign direct investments – a core objective of the IDZ programme. Effective marketing requires a dedicated team or organisation that would identify and target investors and interact with them on a regular basis in their home countries – a role more appropriate to national marketing organizations with international structures rather than zone operators.

2.1.4 Poor stakeholder coordination: There has been a lack of coordination of key national, provincial and local government to help provide the ecosystem in which the IDZs could thrive. The lack of coordination has invariably led to the IDZs not being prioritised when it comes to infrastructure and other support that is critical to their success.

2.1.5 Ad-hoc planning arrangements: The current regulatory framework is not sufficient to guide the long-term planning in IDZs to coordinate and harmonise their plans and facilitate integration into key national, provincial and regional strategies. The ad-hoc planning is further complicated by the ad hoc nature of funding.

2.1.6 Weak governance arrangements: The Manufacturing Development Act 1993 (Act no. 187 of 1993) does not provide sufficient guidance with regard to governance arrangements of an IDZ. The result is that there is often insufficient or timely oversight of the strategic plans and operations of IDZs. Thus, the current legislative framework under the MDA does not make it possible to clarify institutional arrangements and governance of the designated IDZs nor does it provide for coordination and integration mechanisms between stakeholders with clear roles and responsibilities of each. The current legislative framework does not sufficiently address the unique requirements of the programme as it is not based on dedicated legislation focusing explicitly on IDZ- specific requirements. It is therefore imperative to come up with a dedicated legislation that will address the identified weaknesses with the existing IDZs and create a good environment for the Special Economic Zones to thrive.

2.1.7 Design: The critical design weaknesses of the current IDZ Programme relates to the following areas:

- The programme focused exclusively on only one type of an SEZ, namely IDZs, thus the benefits of other forms of SEZs were neither explored nor harnessed.
- The programme was designed that only a few economic regions, those with access to an international airport or sea port, could qualify for support. Some regions, therefore, could not receive support under this programme irrespective of their economic development needs, opportunities or challenges. As an example, Gauteng could receive support, while Limpopo could not. On the other hand, East London could receive support, while the under-developed region of Mthatha could not receive any support.

2.1.8 Nature of support: International experience shows that successful SEZ programmes tend to focus on the provision of holistic and comprehensive packages of business development support which include infrastructure, skills development, technology, research and development, market support, finance, market access, logistics, and incubation programmes.

2.1.9 In the case of the IDZs in South Africa there was also too much focus on in-zone activities and enterprises, and insufficient attention paid to out-of-zone activities, even those critical for the success of in-zone enterprises and sustainability of the zone. IDZs were established to support the development of export oriented industries. Industrial development requires that not only the zone but the host region be able to support the long term development of those industries.

Section 3: Definition of Special Economic Zones

3.1 What are Special Economic Zones?

3.1.1 Definition

3.1.1.1 Special Economic Zones (SEZs) are geographically designated areas of a country set aside for specifically targeted economic activities, supported through special arrangements (which may include laws) and support systems that are often different from those that apply in the rest of the country. The definition suggests three important elements as follows: (a) designated area, (b) targeted industrial activities, that bring additionality to the economy, and (c) an appropriate support system that responds to the needs of the host region, targeted industries and investments, and other key role players.

3.1.1.2 Moreover, an SEZ is an economic development tool to promote rapid economic growth by using support measures to attract targeted foreign and domestic investments and technology.

3.1.1.3 The zones act as a magnet for investment and industrial capability development in desirable activities in specially designated areas by providing quality infrastructure complemented by an attractive incentives package, business support services, cluster development and minimal red tape. They promote industrial agglomeration and cluster development which is important for creating economies of scale. Secondly Special Economic Zones facilitate coordinated planning and implementation as the various agencies and systems that directly and indirectly support industrial development have to act together to achieve common objectives.

3.2 Types of Special Economic Zones:

3.2.1 SEZs may be either sector specific or multi product as follows:

- **A free port** means a duty free area adjacent to a port of entry where imported goods may be unloaded for value-adding activities within the Special Economic Zone for storage, repackaging or processing, subject to customs import procedures;
- **Free trade zones** means a duty free area offering storage and distribution facilities for value-adding activities within the Special Economic Zone for subsequent export;
- **Industrial development zone** means a purpose built industrial estate that leverages domestic and foreign fixed direct investment in value-added and export-oriented manufacturing industries and services;
- **Sector development/Specialised zones** means a zone focused on the development of a specific sector or industry through the facilitation of general or specific industrial infrastructure, incentives, technical and business services primarily for the export market;

3.2.2 The different categories are intended to complement one another and can be integrated into a single zone plan. For example, any Special Economic Zone would need various types of industrial activities and support measures such as, training facilities, business incubators, export distribution centres, etcetera.

3.3 Eligibility Criteria for SEZ Designation:

3.3.1 Access to Special Economic Zones will be confined to

- New businesses or the expansion of existing businesses for:
- Manufacturing activities
- The provision of designated internationally traded services
- Carrying out the activities of trading/warehousing.

Existing businesses already set up or functioning in an existing IDZ in South Africa before the commencement of the SEZ Act, however their eligibility to the SEZ incentive package will be contingent on them meeting the incentive criteria. Re-locations of existing businesses into SEZs will not be eligible. The Special Economic Zones will be reserved for companies whose SEZ originated sales will be primarily derived from export activities.

Eligible tradable services could be defined as follows:

- Computer software services, call centres, data processing, engineering and design services, insurance claim processing, medical transcription, legal databases, support services and web site services.
- Professional services.
- Other business services – namely audio visual services, construction related services, educational services, environmental services and research and development services.

SECTION 4: Rationale for the Policy Review

4.1 Rationale for SEZs in South Africa

Various factors have prompted the review of the IDZ policy and a subsequent policy shift to SEZ programme, namely:

4.1.1 **Developments in national economic policies and strategies:**

Some of the changes in key economic policies and strategies post the introduction of the IDZ programme include the introduction of the National Industrial Policy Framework (NIPF) which outlined key policy ambitions, the Accelerated and Shared Growth Initiative for South Africa, and the recently introduced New Growth Path (NGP) as well as the National Development Plan (NDP). The IDZs, as instruments of industrialisation could not address the broad policy objectives of the said national policies. It is imperative that broader policy instruments be introduced and be calibrated to the government's new strategic direction, as pronounced by the NIPF, NGP and NDP. The SEZ is such a tool and will be useful to support the implementation of the Industrial Policy Action Plan and the promotion of beneficiation and industrial development.

4.1.2 **Special Economic Zones global trends**

Special economic zones are widely used throughout the world as a tool for industrial and economic development. According to the World Bank (2008) there were over 3 000 special economic zones in over 135 countries in 2008. These zones accounted for over 68 million direct jobs and over US$500 billion direct trade-related value added within these zones.

The following are some of the factors that underpinned the success of Special Economic Zones based on global experience:

- **Targeted industrial capabilities** were well defined and served as organising and planning reference point. These capabilities also served as anchors for the other industrial activities, and guided foreign direct investment promotion.
- **Focus on host regions rather than just designated areas** enabled integration of in-zone and out-of-zone activities, and prepared the entirety of the host regions to be a magnet for the desired foreign and domestic investment.
- **Foreign direct investment used as a platform to master desired industrial capabilities** rather just satisfaction with outcomes such as jobs created and exports generated.
- **Very strong institutions:** to facilitate coordinate and steer the development of special economic zones towards the achievement of industrialisation goals. Effective institutional arrangements are critical for (a) ensuring a high level of policy and strategy coordination among all key agencies and across all tiers of government, and for (b) quick decision-making.
- **Effective planning arrangements:** characterised by high levels of coordination and comprehensiveness enough to take into account not only economic aspects but also the social, environmental, and others. In addition, planning tends to take a long-term in order to provide enough time for the mastery of the desired industrial capabilities.
- **Holistic support systems:** that go beyond the provision of world-class infrastructure and includes other key support measures such as skills development, logistics, business incubation, environmental protection, technology, research and development, and effective financial support.
- **Financing arrangements:** Adequate financial support to enable long-term planning and infrastructure development, as well as good investment incentive packages are also important features of successful special economic zones development regimes. In successful regimes, one of the key roles of government is to finance infrastructure development which is critical to the success of any programme for special economic zones.
- **Strong business linkages:** between foreign and domestic firms and between large and small and medium firms. These linkages are key to the transfer of technology and know-how from the foreign investors to domestic enterprises and therefore important for the country to master the desired industrial capabilities. The integration of the small and medium enterprises in these value chains is also important as it increases the number of domestic players into the desired value chains and therefore strengthens the mastery of the desired industrial capabilities.

4.1.3 **Developments in the global economic environment:** Since the introduction of the IDZ programme, the global economy has experienced drastic changes including increased competition for foreign direct investment, a shift in global economic power balance from the west to the east, shifts in geo-political arrangements including the formation of BRICS and other groupings. These and other developments have resulted in, amongst others, emergence of new sources of foreign direct investment, new global economic power relations, and new markets. These have a fundamental impact on how countries compete for foreign direct investment and trade opportunities. In addition, there is a new trend where foreign direct investment is locked in certain international networks. Those within these networks are likely to reap the benefits of FDI while those outside those networks are not likely to benefit. Groupings such as BRICS can assist the country in attracting much desired investments and SEZs can be useful instruments in that regard.

The SEZs in South Africa can be used by foreign and domestic investors as locations for manufacturing, the provision of services and trade as well as mineral beneficiation hubs with a view to servicing African and wider international markets

4.1.4 **Lessons learnt in the implementation of Industrial Development Zones and a Review of SEZ International Best Practice:** The implementation of the IDZ programme and a review of SEZ international SEZ best practise provided valuable experience and lessons for government which need to be factored into future efforts to attract foreign and domestic direct investment. The lessons learnt include the following:

- SEZs are the **key tools** used in all of the fastest growing economies including China, India, Brazil, and others to accelerate the development of targeted industries and attract desired foreign and domestic direct investment.
- **Leadership** and effective implementation may be more important than even a good policy or strategy.
- **Coordination** across all tiers of government and public entities is necessary to speed up implementation.
- An SEZ is a tool for economic development and **not an end in itself**. It is therefore important to focus on the goal of economic or industrial development rather than just the tool.
- The potential benefits of SEZs are not automatic but depend on whether the necessary conditions are created for their success. These conditions include **strong political and technical leadership**, commitment over the long-term and integrated development planning.
- SEZs tend to work where the **targeted** investment opportunities and desired industrial capabilities are clear.
- SEZs are not necessarily permanent but are used as a **development tool** until an area has achieved industrial sustainability.

4.1.5 **Modest performance of the IDZ programme:** When compared with programmes in countries such as China, Korea, India, Malaysia and others, the performance of South Africa's IDZ programme, as highlighted in section 1.3 above, is fundamentally modest and falls short of the expectations of all stakeholders, and requires revamping.

4.1.6 **Restricted design of IDZ Programme:** The programme was designed that only a few economic areas, those with access to an international airport or sea port, could qualify for support.

4.1.7 **The shift in economic power from the west to the east** has resulted in new sources of foreign direct investment. This provides a window of opportunity for targeted foreign direct investment attraction from both old and new sources.

4.2. The Case for Special Economic Zones in South Africa

4.2.1 **the dti** has identified the SEZs as instruments for advancing the country into a higher industrialisation path. This assertion is not only based on the success of SEZs elsewhere, but on the potential for SEZs in South Africa based on the endowment of South Africa with mineral and natural resources, including ample land availability, prudent economic policies and good regulatory environment, country's potential as a gateway to Africa , BRICS and other international markets as well as South Africa's relatively high international rankings in terms of ease of doing business and international competitiveness. These elements provide a sound foundation on which South African SEZs, properly planned, funded, developed, managed and marketed; can contribute to achieving national economic goals.

SECTION 5: The Aim and Objectives of the SEZ Policy

5.1 Aim of the policy

5.1.1 The Special Economic Zones policy aims to position special economic zones as an effective tool for industrial development, and is flexible and rigorous enough to be responsive to the development needs of all regions, as well as the needs of investors and other key role-players.

5.1.2 The purpose is to provide a clear policy framework with respect to the development, operations and management of SEZs addressing the following challenges of the current programme through:

- Expanding the strategic focus to cover diverse regional development needs and contexts, and improve the design deficiencies of the IDZs programme;
- Providing a clear, predictable and systematic planning framework for the development of a wide array of SEZs to support implementation of the Industrial Policy Action Plan, regional industrial development strategies, National Development Plan (NDP) and the New Growth Path (NGP);
- Clarifying and strengthening governance arrangements for the management of SEZs;
- Expanding the range and quality of support measures beyond the provision of infrastructure, including both in-zone and out-of-zone support measures;
- Developing and implementing a predictable financing framework to enable long-term planning;
- Developing and implementing a comprehensive programme to support the development of SEZs, including their marketing; and
- Addressing all the weaknesses of the Industrial Development Zones Programme, and introducing best practices in the planning, development and management of special economic zones.

5.2 Objectives of Establishing SEZs in South Africa

5.2.1 To facilitate the creation of an industrial complex having a strategic economic advantage for targeted investments and industries in the manufacturing and tradable services sectors;within the framework of the IPAP, New Growth Path and the New Development Plan,

5.2.2 To promote beneficiation and value addition to the country's minerals and other natural resources,

5.2.3 To develop infrastructure required to support the development of the targeted industrial activities,

5.2.4 To attract relevant foreign and domestic direct investment and taking advantage of existing industrial and technological capacity, promoting integration with local industry and increasing value-added production,

5.2.5 To accelerate exports and economic growth and the creation of much needed jobs,

5.2.6 To contribute to balanced industrial development.

5.3 Special Economic Zones Model

5.3.1 There are diverse models of Special Economic Zones across the world. In general, Special Economic Zones can be categorised into those that function as extraterritorial enclaves within a country, and then those that operate within the borders of a country. In the former, general laws that operate in the rest of the country are

suspended; while in the latter all the rules of the country apply in the zones.

5.3.2 The model of Special Economic Zones being promoted is one in which the zones will not be independent enclaves, and therefore, will not require the suspension of the constitution or any other law of the country in any of the designated Special Economic Zones.

5.3.3 As part of broader efforts to accelerate industrial decentralisation, government will also promote multi-nodal or multi-site special economic zones; wherein a single Special Economic Zone may cover several hubs spread throughout a city or region; and with each hub focusing on specific industrial activities or mix thereof.

Section 6: Key Aspects of The Special Economic Zones Policy

6.1 Institutional Framework of the SEZs

6.1.1 In the South African context, the following will be the key institutions in the planning, development and management of special economic zones:

- **The Minister of Trade and Industry** will take overall responsibility for the development and implementation of policy, strategy and programmes for the effective development of special economic zones and regulation of the SEZs.
- **Special Economic Zones Advisory Board** will be established in terms of the SEZ Act to advise the Minister on policy, strategy and programmes for the development of special economic zones, as well as on any other relevant matter that the Minister may refer to the Advisory Board including assessing applications for special economic zones and making recommendations to the Minister whether such applications should be approved or not. The composition of the Advisory Board shall be such that the following are included:
  - All critical departments and agencies in the planning, development and management of zones,
  - Independent experts on the development of special economic zones,
  - Specialised skills such as the management of industrial estates, industrial financing, etc.
- **The Department of Trade and Industry** will be responsible for overall facilitation and coordination of the special economic zones programme and amongst others provide the following services:
  - Secretariat support for the Special Economic Zones Advisory Board,
  - Technical support to provinces, municipalities, other government departments, and zones with regard to the planning, development and management of zones,
  - Cooperation, coordination and liaison with other agencies and departments with specialised support functions for the development of zones such as National Treasury, SARS, Transnet, Eskom, etc.
- Operating entities are responsible for the day to day management of the zones including the development and implementation of a long-term plan to ensure that the targeted industries are developed, the development of the infrastructure required in the zone, and marketing the zone locally and internationally, in conjunction with national marketing agencies, in order to attract desired investments. In order to ensure that the zones are developed as swiftly as possible, provision shall be made for the participation of the local and international private sector in the management and operations of zones. This shall be done either through public private partnerships or through the complete outsourcing of operating entities.
- The provision of private sector participation in the management and operations of zones is essentially informed by (a) the fact that the development of special economic zones is relatively new in the country and the relevant skills are not likely to be widespread in the public sector, and (b) foreign direct investment is increasingly locked in certain international networks, with access to these networks being an important factor in securing such foreign direct investment.

6.2 Governance Arrangements of the SEZs

6.2.1 Efficient governance arrangements are critical to the planning, development and management of special economic zones as such

arrangements will ensure:

- Effective guidance for the development and implementation of strategic and operational plans,
- Transparency and accountability in the use of public resources,
- Responsible execution of mandates at all levels and phases,
- Clarity with respect to the roles of the different role players,
- Promotion of coordination across all tiers of government, as well as cooperation among all critical agencies.

6.2.2 Poor governance arrangements have been identified as one of the major weaknesses of the current IDZ Programme which resulted in uncertainty with respect to which authority had responsibility for the strategic direction of an IDZ and who had accountability for the success and failure of these zones.

6.2.3 The following provisions are being made with respect to governance of special economic zones:

- **Ownership:** Provision is made for national government departments, provinces and municipalities, public entities, and private-public partnerships to apply for the establishment and development of SEZs, and thereby act as the owners of the relevant special economic zone.
- **Operator:** The owner (licence holder) of an SEZ can appoint any public or private entity, through an open transparent procurement process, as a developer of the SEZ for a specified period.
- **Oversight and accountability:** The relevant Minister, Provincial Member of the Executive Council responsible for economic development or the relevant Executive Mayor shall assume oversight and accountability for the operations of the relevant SEZ in the case of government owned SEZs.
- **Coordination across the spheres:** Measures shall be taken to promote effective participation of all three tiers of government, including public entities in the development and operations of SEZs.

6.3 Special Economic Zones Strategy

6.3.1 In order to promote a clear, predictable and systematic planning framework for the development of a wider array of SEZs, the Minister shall, when necessary review the SEZ Policy and when necessary, review the SEZ Strategy to outline the desired approach to the development of Special Economic Zones for the following period.

6.3.2 The SEZ Strategy shall be a guide to both existing and planned SEZs on the national and regional priorities.

6.3.3 As far as possible, measures shall be taken to minimise negative competition and promote complimentarity and cooperation among local SEZs.

6.3.4 Participation of all three tiers of government, other key departments and agencies such as National Treasury, Department of Science and Technology, Department of Home Affairs, South African Revenue Services, Department of Transport, Department of Higher Education, Department of Water Affairs and Environment, Eskom and Transnet in the planning and development of special economic zones will be critical.

6.4 Financing Special Economic Zones

6.4.1 Special Economic Zones are expensive to develop and require

significant resources. A predictable financing framework is required to facilitate long-term planning.

6.4.2 **Special Economic Zones Fund:** shall be established by the Minister of Trade and Industry in concurrence with the Minister of Finance. The fund shall be used to support the planning and development of special economic zones including the following elements: finance approved site servicing, bulk infrastructure provision and business development of the SEZs, such as feasibility studies, general research etcetera.

6.4.3 **Mix of financing options:** in order to encourage sound zone development and long term planning, there should be a mix of financing instruments provided by various financing institutions, including the Development Finance Institutions (DFIs).

6.4.4 The Rules and guidelines for the administration of the SEZ fund shall be developed.

6.5 Special Economic Zones Incentives

6.5.1 SEZ incentives shall apply to Greenfield investments locating in the SEZs as well as expansions to Brownfield investments within the SEZs. The use of incentive packages is a common international practice in attracting foreign or domestic direct investment. The following provisions are made with regard to the use of incentives within the framework of the SEZ Programme:

- The Minister of Trade and Industry may provide a package of incentives as a way of improving the investment attractiveness of all or individual SEZs in the country.
- Relevant provinces and municipalities may consider additional incentives for enterprises locating within their SEZs.
- Individual special economic zones may consider additional incentives for enterprises locating within those zones.

6.5.2. Measures shall be put in place to ensure the sharing of information and coordination across the spheres of government and across zones and also to avoid the race to the bottom and double dipping by investors.

6.6 Eligible Activities

6.6.1 SEZs are part of a broader industrial policy framework, as highlighted by the IPAP, NDP and NGP. The SEZs shall be developed mainly to attract industrial activities that are in line with the country's policy objectives.

6.6.2 It is critically important that only eligible activities are allowed to take place in the SEZs. Such eligible activities shall comprise manufacturing activities that will include processing, assembly, mixing and fabrication. The manufacturing activities shall be done in terms of the South African procurement regulations.

6.6.3 Internationally Traded Services Activities:

- Computer software services, call centres, data processing, engineering and design services, insurance claim processing, medical transcription, legal databases, support services and web site services.
- Logistics and warehousing activities such as shipping, handling, storage of goods, clearing and forwarding, distribution management, freight consolidation and reception.
- SEZ Development Activities: including construction and refurbishment of infrastructure and super structures that will be undertaken by a licensed operator.
- Other business services – namely audio visual services,

construction related services, educational services, environmental services and research and development services.

6.7 Support system

6.7.1 An effective and efficient support system is one of the important requirements for the successful development of Special Economic Zones.

6.7.2 The current system has focused almost exclusively on the provision of world-class infrastructure which, though necessary, was never sufficient for the successful development of Special Economic Zones.

6.7.3 Successful Special Economic Zones regimes are characterised by the provision of comprehensive support systems that go beyond the provision of world-class infrastructure and include all other key inputs to successful industrialisation such strategies for the development of human capital, logistics, technology, research and development, business incubation and other measures for the promotion of small and medium enterprises.

6.7.4 The new policy provides for a comprehensive support system for Special Economic Zones that includes but not limited to the following:

- Provision of world-class industrial and social infrastructure,
- Strategies to develop human capital,
- Technology, research and development to ensure on-going technological innovation,
- Distribution centres,
- Logistics support,
- Business incubation,
- Environmental management plans, and
- Standards, quality and productivity.

6.8 Planning of Special Economic Zones

6.8.1 Planning is the most important phase in the development of Special Economic Zones and it is the phase in which the following are, amongst others, defined: goals and objectives, targeted economic activities or industrial capabilities, support measures required, sequencing of interventions, performance targets and milestones, and critical stakeholders to be mobilized in the various phases.

6.8.2 The planning approaches of the successful models for Special Economic Zones development include the following aspects: (a) comprehensive and looking beyond the economic, (b) focusing on the host regions rather than the designated zone, (c) comprehensive and long-term, and (d) integrated and coordinated across and between all tiers of government and other critical players.

6.8.3 The following are the key features of the current planning arrangements and effectively the major planning weaknesses:

- Planning is largely ad-hoc and short-term; and does not extend beyond the MTEF period. These planning arrangements make it impossible to develop and master new industrial capabilities,
- There is effectively no participation of the host municipalities or regions and other critical partners at provincial and national levels. Consequently, there economic development plans of the host municipalities are not integrated with plans for the development of industrial development zones.
- Planning focuses only on the economic and overlooks the social, technological, environmental, and other key aspects that are necessary for the holistic development of the host region. Almost

all strategic plans of the current Industrial Development Zones are dominated by activities for the provision of industrial infrastructure and activities for investment promotion.

6.9 One-Stop-Shop facility

6.9.1 A One-Stop-Shop facility is one of the key services provided in a special economic zone, and is a mechanism intended to minimize red tape in handling investments by reducing the time it takes to register an investment and issue the necessary permits to enable the investor to start operations.

6.9.2 In South Africa, all the three tiers of government provide permits without which an investor cannot operate. Even within the same tier of government, various agencies provide various permits for investments. Given the variety of agencies that have to issue permits to investors, if the process is not well managed and coordinated; the country can lose vital direct investments to other competing countries especially given that competition for foreign direct investment is global and increasingly intensifying.

6.9.3 This policy proposes a development of a suitable One-Stop-Shop model that will make the South African SEZ model to be globally competitive. The One-Stop-Shop model shall be completed within six months of the approval of this policy.

Section 7: SEZ Implementation Framework

7.1 In order to ensure successful and effective implementation of the Special Economic Zones Policy, **the dti** shall, in conjunction with other relevant departments and agencies, develop and implement a comprehensive SEZ programme. The roles and responsibilities of several institutions need to be clarified and the Implementation Protocol need to be developed to formalise the agreements and to ensure that all the parties play their roles.

7.2 This SEZ policy which guides the designation, promotion, development, operation and management of the SEZs shall be reviewed by the Minister of Trade and Industry when necessary. The SEZ Advisory Board shall monitor the policy implementation.

7.3 **the dti** shall establish a legislative framework (the Act, regulations and guidelines) to regulation and guide development of the SEZs. The SEZ Advisory Board shall regulate the SEZ programme in terms of the SEZ legislation.

7.4 In order to ensure that newly designated SEZs are of the strategic nature and support industrialisation and economic growth strategies, **the dti** must develop the SEZ strategy and review it when necessary. The SEZ Advisory Board shall be responsible for the implementation of the strategy.

7.5 **Marketing:** A national marketing strategy is required to promote all the zones internationally and domestically in order to attract the desired investments. **the dti** shall develop an SEZ Marketing Strategy that will determine a marketing mechanism for the SEZs.

7.6 **SEZ Incentives: the dti** in agreement with National Treasury shall develop a suit of SEZ incentives that will be used to attract investors to the zones. The SEZ incentives package should be developed and approved before the formal launch of the SEZ programme.

7.7 **Special Economic Zone Fund: the dti** in agreement with National Treasury shall establish an SEZ Fund that will support infrastructure (bulk, fencing and clearing) and business development of the SEZs. The initial Fund shall be capitalised by the government;must be available from the planning phase of the SEZs and shall be managed by **the dti** or any agency that will be appointed by the Minister of Trade and Industry.The Fund shall be administered in terms of the regulations and guidelines that **the dti** will develop prior to the launch of the Fund.

7.8 **Capacity development:** A capacity building programme is required to ensure that relevant government officials across the three tiers of government as well as senior executives of SEZs have the necessary skills and competencies. All the national, provincial and local government employees that will work on the SEZ programme should be provided with prior training to enhance their understanding and skills in the SEZ environment. **the dti** should organise such training and skills development.

7.9 **Skills strategies:** It is imperative for the SEZ to establish skill base in and around their host regions. This helps to attract investments and stimulate economic activities. Regional skills strategies have to be developed and implemented to support the short, medium and long-term skills needs of enterprises and industries within the zones and in the host regions. **the dti** must lead the development of Skills strategies to ensure alignment to the objectives of IPAP and NGP.

7.10 **Infrastructure:** The key requirement for SEZs is the provision of appropriate and world-class industrial infrastructure. **the dti** shall, through the use of the SEZ Fund, ensure that the SEZs are provided with the world class infrastructure

7.11 **Logistics:** Effective and efficient logistics are the life-blood of any trade and are key to industrial development. **the dti** should liaise with the relevant departments and agencies to ensure that constraints and bottlenecks pertaining to logistic costs are dealt with and the logistic costs are effectively lowered for SEZ businesses.

7.12 **Business incubation:** Incubation or supplier development programmes are critical for nurturing domestic entrepreneurs and enterprises and facilitate their integration into the key value chains in the zones and regions. **the dti** shall lead the development of supplier development programmes so that SMMEs are fully integrated into the main SEZ business activities.

7.13 **Environmental protection:** Sustainable industrial development requires that appropriate measures be taken to ensure that industrialisation takes place without the destruction of the environment. Thus **the dti** will work closely with the environmental authorities to ensure sustainable development.

7.14 **Technology, research and development:** Measures to facilitate on-going technological innovation and access to appropriate technologies for emerging enterprises. **the dti** together with the DST and institutions of higher learning, shall work together to achieve this goal.

7.15 **Quality and productivity:** Continuous quality and productivity improvement programmes are necessary to ensure that SEZ enterprises can compete globally.

7.16 The programme is intended to provide key government services that are necessary to sustain the targeted industries and also to support the enterprises and investors in the zone and surrounding region.

7.17 Government support to each SEZ shall be provided in accordance with a revised financing model being developed for SEZs.

Section 8: Monitoring And Evaluation

8.1 In order to ensure that the SEZ Programme achieves its intended objectives, measures shall be put in place to monitor and report on the performance of the Programme across the entire results chain including inputs, outputs, outcomes and impact. These will be useful in guiding policy direction. This will be done in terms of the Government Wide Monitoring and Evaluation system.

8.2 Monitoring and performance management is a shared responsibility between **the dti**, provinces, and municipalities as well as developers and operators and various elements will be monitored at different levels. Reporting on SEZ performance shall be submitted to the SEZ Advisory Board by the SEZ licence holders (owners). The SEZ Advisory Board shall be responsible for monitoring and evaluation of SEZs.

8.3 Measures will be put in place by **the dti** to ensure that an effective monitoring, reporting and evaluation system is in place, including the guidelines and regulations when necessary.

8.4 Government intends to report at least annually on the performance of the Special Economic Zones Programme.

8.5 The SEZ Advisory Board will coordinate monitoring and evaluation to ensure that the strategic plan and SEZ Master Plan targets are achieved.

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SOUTH AFRICA'S SPECIAL ECONOMIC ZONES

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Department:
Trade, Industry and Competition
REPUBLIC OF SOUTH AFRICA

the dtic - together, growing the economy

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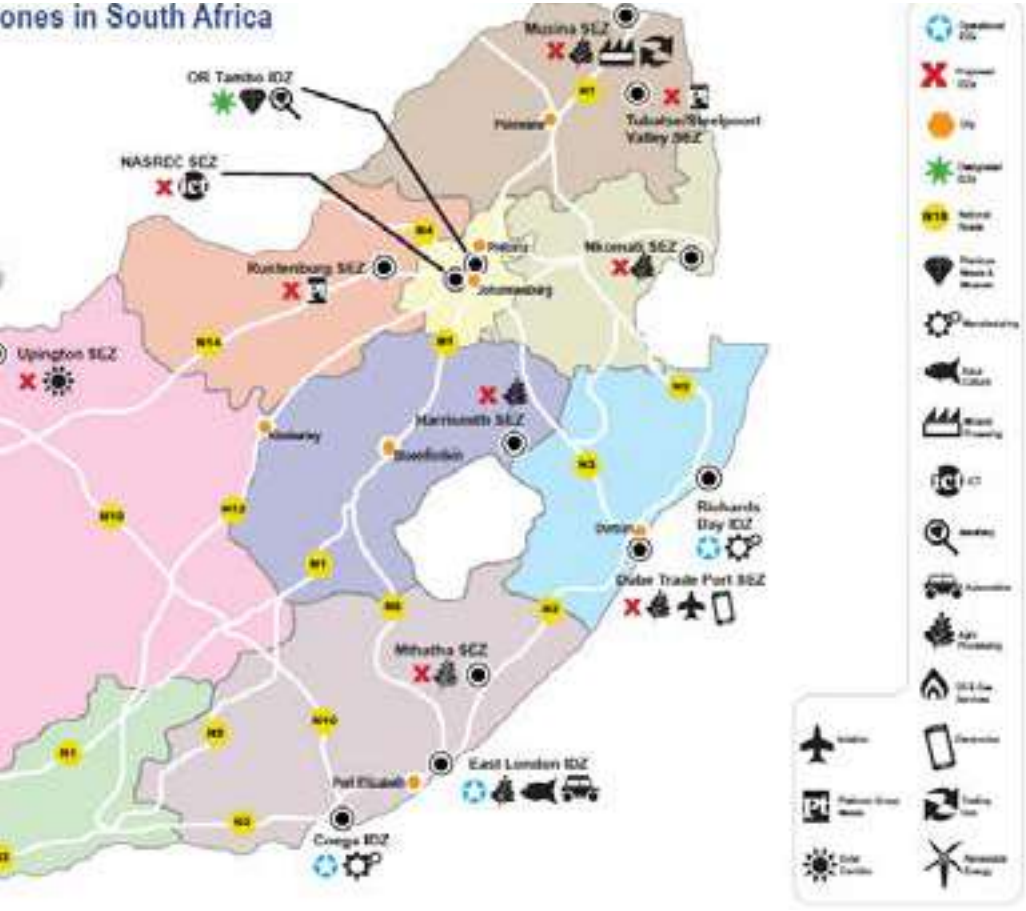
SECTION 1: BACKGROUND

The South African Government seeks to transform the economy into a globally competitive industrial economy, built on the full potential of all citizens and regions.

One of the critical tools for accelerating the country's industrial development agenda is on the new Special Economic Zone (SEZ) Programme, which was mandated by the SEZ Act, proclaimed in February 9, 2016. SEZs are a tool to help (i) promote industrial agglomeration, (ii) build the required industrial infrastructure, (iii) promote coordinated planning among key government agencies and the private sector, and (iv) guide the deployment of other necessary development tools. Below is a list of designated and planned SEZs in South Africa.


ones in South Africa
Musina SEZ
OR Tambo IDZ
Polokwane
Tubatse/Steelpoort Valley SEZ
NASREC SEZ
Pretoria
Nkomazi SEZ
Rustenburg SEZ
Johannesburg
Upington SEZ
Harrismith SEZ
Richards Bay IDZ
Durban
Dube Trade Port SEZ
Mthatha SEZ
East London IDZ
Port Elizabeth
Coega IDZ

1. LIST OF DESIGNATED SEZs

South Africa has 11 SEZs located in different provinces, namely:

1.1. COEGA SEZ (EASTERN CAPE)

The Coega SEZ is the largest in Southern Africa. It was designated in 2001 and became South Africa's first IDZ. It is strategically located in the Nelson Mandela Bay Metropolitan Municipality on the East-West trade route, to service both world and African markets. The Coega SEZ leverages public-sector investment to attract foreign and domestic direct investment in the manufacturing sector with an export orientation. The SEZ has attracted investment in the agro-processing, automotive, aquaculture, energy, metals logistics and business process services sectors. This has advanced socio-economic development in the Eastern Cape through skills development, technology transfer and job creation.

For more information, visit www.coega.co.za

1.2. RICHARDS BAY SEZ (KWAZULU-NATAL)

The Richards Bay SEZ is a purpose-built and secure industrial estate on the north-eastern South African coast. The N2 business corridor links the province's two major ports, Durban and Richards Bay, and connects with Maputo in Mozambique and, ultimately, areas of East Africa. It is linked to an international sea port of Richards Bay, tailored for the manufacturing

and storage of minerals and products to boost beneficiation, investment, economic growth and, most importantly, the development of skills and employment. First-world infrastructure allows for full exploitation of the area's natural and strategic advantages. Through the superb industrial infrastructure, well-established network of shipments, and tax- and duty-free incentives, the SEZ aims to encourage international competitiveness and attract export-orientated manufacturing investment.

For more information, visit www.rbidz.co.za

1.3. EAST LONDON SEZ (EASTERN CAPE)

Innovation, efficiency, growth and sustainability are key to the East London SEZ (ELSEZ). Established in 2003 as part of the South African Government initiative to improve industrial competitiveness and economic growth in the country, the zone has become a prime industrial park, renowned for its customised solutions for various industries, including automotive, agro-processing and aquaculture. The ELSEZ offers growth-oriented companies a specialised manufacturing platform, innovative industrial and business solutions, and access to new markets and strategic industry networks.

The SEZ is located in Buffalo City, the municipal area that incorporates Bhisho, the province's capital, and King William's Town. It is one of the first IDZs in South Africa to be operational and is an ideal choice for the location of

exported manufacturing and processing, providing investors with connections to major markets, locally and across the globe.

For more information, visit www.elidz.co.za

1.4. SALDANHA BAY IDZ (WESTERN CAPE)

Former President Jacob Zuma launched the Saldanha Bay SEZ (SBSEZ) in the Western Cape on 31 October 2013 and handed over the operator permit. It is envisioned that this SEZ will serve as the primary oil, gas and marine repair engineering and logistics services complex in Africa, servicing the needs of the upstream oil exploration industry and production service companies operating in the oil and gas fields off Sub-Saharan Africa. Situated approximately two hours north of Cape Town, the SBIDZ will include logistics, repairs and maintenance, and fabrication activities.

For more information, visit www.sbidz.co.za

1.5. DUBE TRADEPORT SEZ (KWAZULU-NATAL)

Dube TradePort is a catalyst for global trade and a portal between KwaZulu-Natal and the world. It is the only facility in Africa that brings together an international airport, cargo terminal, warehousing, offices, retail sector, hotels and agricultural area. Located 30km north of Durban, Dube TradePort is positioned between the two biggest sea ports of Southern Africa, and linked to the rest of Africa by road and rail.

29° SOUTH

Areas that have been designated as the SEZ are the Dube TradeZone and the Dube AgriZone. The facility offers space for warehousing, manufacturing and assembly of goods, complete with a single facility in which all freight-forwarders and shippers are located (Dube TradeHouse). There is also a direct link to the adjacent Dube Cargo Terminal via an elevated cargo conveyor system.

The **Dube AgriZone** is a high-tech, future-farming facility that hosts the continent's largest climate-controlled growing area under glass and focuses on high-value, niche agricultural and horticultural products. The AgriLab will look into specialised tissue culture, greenhouses, and flowers and plants, all of which require swift air transportation.

For more information, visit www.dubetradeport.co.za

1.6. MALUTI-A-PHOFUNG SEZ (FREE STATE)

Maluti-A-Phofung SEZ in Harrismith, Free State, lies at the mid-point of the crucial Durban-Johannesburg logistics route. This newly established SEZ offers exporters a logistics base that facilitates access to the Port of Durban, and intermodal logistics solutions for the transfer of freight between road and rail. The zone is well-suited and licensed for general manufacturing, offering a convenient production base for light and medium manufacturing. With excellent logistics links by road or rail to South Africa's industrial heartland, the Port of Durban and the southern Bloemfontein-Cape Town route, the

SEZ is a natural choice for investors seeking a cost-effective location to service domestic and export markets.

In addition, the SEZ intends building on existing strengths to attract agro-processing industries to an area that has good access to the products of the agriculturally rich Free State. It harbours intentions of acting as an agglomeration, storage and logistics point for agricultural produce. Owned by the Free State Development Corporation, this site has existing facilities that can be leased immediately, and is currently upgrading both the internal road and utility infrastructure to meet expected demand.

For more information, visit www.fdc.co.za

1.7. OR TAMBO SEZ (GAUTENG)

The OR Tambo SEZ aims to develop land around OR Tambo International Airport to stimulate economic development through the use of the SEZ mechanism. The OR Tambo SEZ supports the growth of the beneficiation of precious metals and minerals sector, with a focus on light, high-margin, export-oriented manufacturing of South African precious and semi-precious metals. The multi-site development at OR Tambo SEZ consists of several industry-specific precincts and will be developed in phases over a 10- to 15-year period.

For more information, visit www.gidz.co.za

1.8. MUSINA/MAKHADO SEZ (LIMPOPO)

The Musina/Makhado SEZ comprises two geographical locations that address unique industrial clusters. The site in Musina targets the light industrial and agro-processing clusters, while the Makhado site is a metallurgical/mineral beneficiation complex. A third site has been identified to target the petrochemical industries.

The SEZ is strategically located along the N1 North-South route into the Southern African Development Community (SADC), very close to the border between South Africa and Zimbabwe. It forms part of the Trans-Limpopo Spatial Development Initiative (SDI) and has been developed as part of greater regional plans to unlock investment and economic growth and address the development of skills and employment. Newly built infrastructure enables full utilisation of the area's unique combination of mineral endowments and supports industries in the full-value chains for mineral beneficiation, agro-processing and light industrial manufacturing.

The strategic location of the SEZ and its close proximity to the main land-based route into SADC and the African continent, together with supporting incentives and a good logistics backbone, will make it the location of choice for investment in the mineral beneficiation, agro-processing and petrochemical industries.

For more information, visit www.mmsez.co.za

1.9. ATLANTIS SEZ (WESTERN CAPE)

The proposed Atlantis SEZ is part of the City of Cape Town's initiative taken in 2011 to establish a greentech manufacturing hub in Atlantis. This was in response to the Department of Energy's Renewable Energy Independent Power Producer Programme (REIPPP). Localisation of manufacturing and the resultant job creation is one of the key priorities of Government through the REIPP programme.

Situated on the West Coast of South Africa, 40km from Cape Town, the proposed Atlantis SEZ (ASEZ) capitalises on the province's already booming renewable energy and green technology sector. Greentech refers to green technologies that reduce or reverse the impact of people on the planet. This includes renewable energy technologies. Wind turbines, solar panels, insulation, biofuels, electric vehicles, materials recycling and green building materials are all examples of green technology. The hub has already attracted its first large greentech investor, Gestamp Renewable Industries (GRI). A wind tower manufacturer, GRI has already invested R300 million and is in full-scale production.

Five reasons for the renewable energy and green technology sector to locate in the Atlantis SEZ:

1. Strong and growing South African and African markets for greentech
2. Well-located and development-ready area
3. Strong support base and existing relationships for investors to tap into
4. One-Stop-Shop for wide-ranging investor support
5. Incentives for investors and tenants

For more information, visit www.greencape.co.za

1.10. NKOMAZI SEZ (MPUMALANGA)

The Nkomazi SEZ is located in the Nkomazi Local Municipality, which is in the eastern part of Ehlanzeni District Municipality and approximately 65km from the central business district of Nelspruit in Mpumalanga. The geographic location of the Nkomazi area is its main competitive advantage. The area is strategically placed between northern Swaziland and the southwest of Mozambique. It is linked to Swaziland by two national roads, the R570 and R571, and with Mozambique by a railway line and the national road, the N4, which together form the Maputo Corridor.

The Nkomazi SEZ is conceptualised as an agro-processing hub, which will be supported by mixed services such as warehousing and logistics. The processing of agricultural products in the Nkomazi SEZ will be based on automated and semi-automated as well as high-tech manufacturing technologies, which will be largely based on green or renewable energy uses. The supporting services will include logistics (intermodal logistic and production logistics) and warehousing facilities, which will also promote the utilisation of green sources of energy. The targeted value chains of the proposed Nkomazi SEZ include secondary and tertiary stages of the processing of citrus and sub-tropical fruits, aromatic plants/herbs, ground and tree nuts, sugarcane, nutraceuticals, meat processing, leather goods and agri-inputs such as fertilizer. The designation of SEZ status for the Nkomazi area will transform what historically has been a rural corridor into an economic ”high-tech agri-hub” thereby improving the productivity of the region.

For more information, visit www.nkomazisez.co.za

1.11. THE TSHWANE AUTOMOTIVE SPECIAL ECONOMIC ZONE

The Tshwane Automotive SEZ (TASEZ) is Africa's first automotive city, located in the country's capital city of Tshwane, Gauteng. It is an attractive world-class automotive city and a preferred investment destination for the automotive industry on the African continent. The proximity of the SEZ to an established automotive industry allows for increased economies of scale and scope, thereby lowering the cost of doing business. It offers world-class customised solutions, incentives, support services and systems for manufacturers seeking excellence, and a productive and progressive location.

The SEZ is a catalyst for employment, transformation, socio-economic development and industry growth. It boasts the most skilled labour in the sector, easy access to a strong consumer base, and connectivity to both suppliers and potential markets, while promoting export-orientated industries and local integration. Located on more than 162.6ha, the TASEZ offers

direct and ready linkages to regional and international markets, making it easy to export to SADC.

The TASEZ is a leading investment destination, offering:

- a secure, business environment with world-class manufacturing and logistics infrastructure that support freight-orientated activities through rail connectivity to ports designed to accommodate both containerised goods and ro-ro ships;
- a number of additional value-added business solutions that will support businesses within the precinct;
- a professional team of sector specialists, who drive the development of the TASEZ and ensure that it remains a competitive business environment, linking both investors and developers to various regulatory bodies and facilitating the development process;
- national government support - the Department of Trade, Industry and Competition (**the dtic**), through the SEZ Fund, provides financial support for investor-related infrastructure; and
- provincial and local government support – the Gauteng Department of Economic Development and the City of Tshwane provides financial support and resources necessary to manage and implement the SEZ.

For more information, visit www.tasez.co.za

2. PROPOSED/NON-DESIGNATED SEZS

Work is under way between **the dtic** and the provinces on the planning and implementation of new SEZs. The current work package focuses on infrastructure planning, designation process and investment promotion.

2.1. BOJANALA SEZ (NORTH WEST)

The proposed Bojanala SEZ is also known as the Platinum Valley SEZ, which clearly indicates its focus on mineral beneficiation of platinum group metals (PGM), including Platinum (Pt), Palladium (Pd), Rhodium (Rh), Osmium (Os), Ruthenium (Ru) and Iridium (Ir).

This process is spearheaded by the North-West Development Corporation (NWDC)

For more information,
visit www.nwdc.co.za

The SEZ falls within the originally conceptualised Platinum Corridor, with the focus on the North-West portion of the East-West Corridor that links Maputo with Walvisbay through Nelspruit, Pretoria, Rustenburg, Lobatse and Windhoek; the Treasure Corridor, to strengthen developments from Johannesburg to Potchefstroom, Klerksdorp and further south along the N12; and the Western Corridor, to strengthen a North-South initiative from SADC through Botswana and the North West to the Northern Cape.

The SEZ targets PGM beneficiation, mining equipment and machinery, renewable energy products and components and logistics, including the upstream value chain as well as several downstream opportunities.

The primary focus of the SEZ is on PGM beneficiation industries and key opportunities include catalysts (automotive catalytic converters), electrical and electronics components, biomedical and pharmaceutical products (cancer treatment and micro implants), high-performance alloys (labware, optical equipment and turbine blades), fuel cells and jewellery.

The SEZ will capitalise on the area's well-established mining industry, good infrastructure and a large labour pool to drive investment and economic growth, skills development and employment. It is perfectly located to take advantage of the main trade routes into SADC and Africa, as well as international destinations by air, attracting investment and supported by **the dtic**'s SEZ incentives, as well as other incentives pertaining to customs and VAT that enhance the competitiveness of export-driven industries in the area.

SECTION 2: SEZ TAX INCENTIVES

To complement **the dtic** SEZ strategy, a package of tax incentives will be available to companies locating in certain SEZs, subject to specific criteria. The tax incentives that companies may qualify for include VAT and customs relief if located within a Customs-Controlled Area (CCA), employment tax incentive, building allowance and reduced corporate income tax rate.

The design and eligibility criteria for each incentive seeks to strike a balance between achieving the objectives of higher levels of investment, growth and employment creation, and ensuring that the incentives are appropriately targeted for efficiency purposes, while minimising any deadweight loss to the fiscus.

Business located within a CCA will qualify for VAT and customs relief (similar to that for the current IDZs). The employment tax incentive will be available to businesses located in any SEZ. Businesses operating within approved SEZs (by the Minister of Finance, after consultation with the Minister of Trade, Industry and Competition) will be eligible for two additional tax incentives. Firstly, all such businesses can claim accelerated depreciation allowances on capital structures (buildings) and, secondly, certain companies (carrying on qualifying activities within an approved SEZ) will benefit from a reduced corporate tax rate (i.e. 15% instead of 28%).

1. VAT AND CUSTOMS RELIEF

Companies located within a CCA will be eligible for VAT and customs relief, as per the current IDZs.

Characteristics of a CCA include the following:

- Import duty rebate and VAT exemption on imports of production-related raw materials, including machinery and assets, to be used in production with the aim of exporting the finished products;
- VAT suspension under specific conditions for supplies procured in South Africa; and
- Efficient and expedited customs administration.

More information on CCAs can be found on the SARS website www.sars.gov.za

2. EMPLOYMENT TAX INCENTIVE

All employers of low-salaried employees (below R60 000 per annum) in any SEZ will be entitled to the employment tax incentive (ETI). This aims to encourage employers to hire young and less experienced work seekers. However, the employee age restriction will not apply to SEZs. It reduces an employer's cost of hiring people through a cost-sharing mechanism with Government, while leaving the wage the employee receives unaffected. The employer can claim the ETI and

reduce the amount of Pay-As-You-Earn (PAYE) tax payable by the amount of the total ETI calculated in respect of all qualifying employees.

3. BUILDING ALLOWANCE

Businesses operating within approved SEZs (by the Minister of Finance, after consultation with the Minister of Trade, Industry and Competition) will be eligible for an accelerated depreciation allowance on capital structures (buildings). The special rate of capital (depreciation) allowances in lieu of normal allowances will be available for erecting or improving buildings and other fixed structures. This rate will equal 10% per annum over 10 years.

Companies engaged in the following activities, based on the Standard Industrial Classification Code issued by Statistics South Africa, will not qualify for the building allowance:

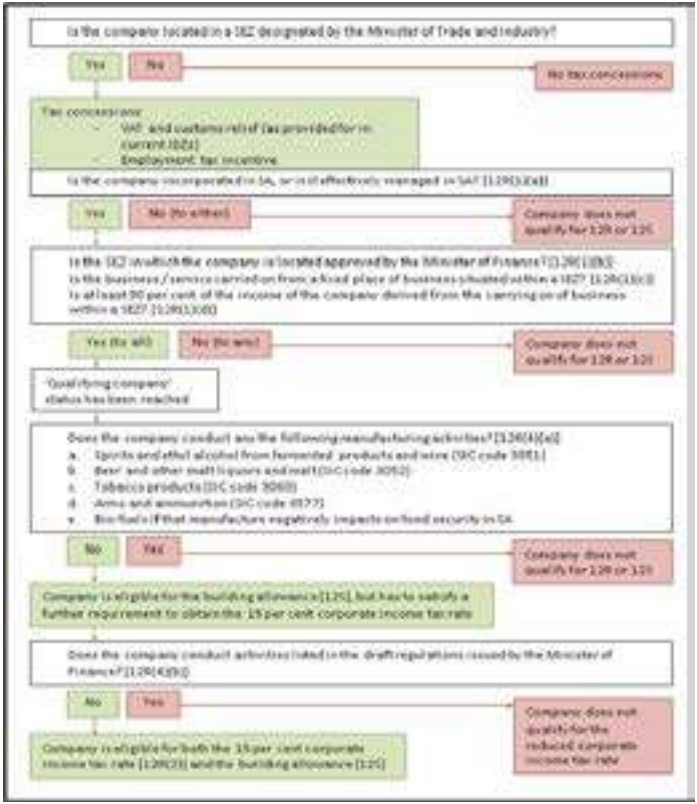
- Spirits and ethyl alcohol from fermented products and wine (SIC code 3051)
- Beer and other malt liquors and malt (SIC code 3052)
- Tobacco products (SIC code 3060)
- Arms and ammunition (SIC code 3577)
- Bio-fuels if that manufacture negatively impacts on food security in South Africa

4. REDUCED CORPORATE INCOME TAX RATE

Certain companies will qualify for a reduced corporate income tax rate of 15%, instead of the current 28% headline rate. To qualify, the following conditions must be satisfied:

- The company must be located in a SEZ that is approved by the Minister of Finance;
- It must be incorporated or effectively managed in South Africa;
- At least 90% of the income must be derived from the carrying on of business or provision of services within that SEZ; and
- The company must not be engaging in activities listed in the Government Gazette No. 39930.

The following decision tree can be used to assist companies in determining whether they are eligible for the tax incentives:



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SAEEC
Southern African Energy Efficiency Convention 2011

Emperors Palace, Gauteng, SA: 16-17 November 2011

Southern African Association for Energy Efficiency (SAEE)
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South Africa
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[redacted]
Email: [redacted]
Website: **www.saee2011.org.za**
REGISTRATION NO: 038-415-NPO/*TPC7a*

14 September 2011

Mr GR Gibbon
Senior Project Manager
Electrical Instrumentation Services in Kitwe Zambia

Dear Mr Gibbon,

PAPER ACCEPTANCE
Paper title: Energy efficiency in the African context for the new millenium

The Board of the Southern African Association for Energy Efficiency (SAEE) takes pleasure in advising you that your paper has been placed through the IEEE review process and has been accepted for presentation at the SAEEC2011, to be held on 16-17 November 2011 in Gauteng.

You will now be placed on the official speaker list as an IEEE reviewed paper presenter. The Convention Organiser will contact you later this week to confirm your time slot and make the final arrangements for your attendance.

Further correspondence will reach you within the next 2 weeks with regards to the IEEE copyrights, style guides and policies and instructions to submit your paper for international publication through the IEEE framework.

Your contribution is truly valued.

Yours sincerely,

For: Dr Willem den Heijer
TECHNICAL PROGRAM CHAIR
IEEE Power and Energy Society

REVIEWED
By Cuthbert Casey Makondo at 7:17 pm, 10/16/17

ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT

REPORT

FOR

STRATEGIC BULK FUEL STORAGE DEPOT OF 102 MILLION LITRES IN LUSAKA DISTRICT BY DELTA ENERGY & GRZ PRIVATE PUBLIC PARTNERSHIP

Prepared and Compiled

by

Casey & Greenwood

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Southern African Energy Efficiency Convention (SAEEC2011)

Energy Efficiency in the African Context for the New Millennium

Form: TPC5

Mr Guy Redvers Gibbon
Electrical Instrumentation Services Kitwe Zambia

ABSTRACT

The purpose of this paper is to provide you with some examples of how the application of automation albeit with computers and electricity can improve the lot of some users and contribute to carbon emission reduction. The first, computers has been accepted as being a genuine contributor although some minority groups have said that computer displays and cell phones can cause cancer or effect the brain while the second, electricity especially in South Africa contributes to carbon emission through dirty coal fired power stations. Personally I believe those of the first until proven wrong are bordering on the lunatic fringe while the second have a point particularly if you live in Mpumalanga, notably Witbank, in the winter months. Countries like Zambia with huge rivers like the Zambezi and Kafue are fortunate to get away with Hydro power while South Africa will most likely have to adopt the nuclear route as the most viable solution to replace coal. I believe like electric vehicles, a prototype I recall seeing as a recent graduate in the seventies, will take some time to replace the proven internal combustion engine of the last century, though in Europe battery charging stations like petrol filling stations are springing up all over particularly, in Spain. So too renewable energy sources such as wind and solar will take some time to replace those such as coal and nuclear. Therefore by converting from petrol or diesel to electric in South Africa though like moving the problem from the end user to the source, it is a step towards energy efficiency in the long term with the move to nuclear power generation. Nuclear though unpopular in certain circles still remains the cleanest energy source after coal for those countries unable to take advantage of hydro power. Ideally if the DRC could harness the mighty Congo River instead of fighting over its resources like those over the oil resources of Nigeria, then all our pollution problems would be resolved except for lots of expensive power transmission lines running south and north. I like the idea I believe Siemens is exploring through Desertec Industrial Initiative (DII) which is to turn the Sahara desert into a plethora of solar panels to feed the energy needs of Europe! Maybe this is how Germany has planned to decommission its nuclear stations.

1. INTRODUCTION

I have chosen three examples to show the utilization of energy efficiency, I have had the privilege of working with in the last decade to display energy savings and contributing to environmental improvements. These are in chronological order firstly Capespan, the largest exporter of citrus fruit in the Southern hemisphere which is an exercise in logistical planning and implementation secondly, Foskor, the largest fertilizer and phosphoric acid producer in South Africa and thirdly, Kagem one of three active emerald mines in the world, the only in Africa.

2. CAPESPAN

The company Capespan, formerly Outspan sources its produce predominantly in the Limpopo province, South Africa between September and January before transporting it to the one of largest cooling chambers in the Southern Hemisphere i.e. the Port of Durban, South Africa with installed refrigeration capacity of 6MVA. The fruit is packed in so called pack houses loaded onto bar coded pallets before being transported predominantly by road truck to the port. The bar coded pallets which through a software package called Paltrack recorded onto a database so it can then be forwarded to the port through data transmission so the pallets en route can be entered into the port database system. The problem encountered by the local operators was how to move some 300 – 400 000 pallets arriving over three month period between February and April from the trucks into the cooling chambers. My first encounter with Capespan in October 1999 was to prepare for this deluge in the year 2000! So while the fire works display was going on outside at the turn of the millennium we inside were evaluating software programmes to smooth the transition of the pallets from the trucks into the cooling chambers and then onto the vessels with minimal disruption and recording of pallet final destination and cooling temperature. The Paltrack system served as a static logging database but lacked the intelligence to direct the pallets to the correct intermediate stowage area and final destination, both local and abroad.

Therefore the management team settled on an enhanced software solution called PCL which had the capacity similar to Cosmos widely used by the container fraternity to trace, track and direct. The shear volume of both containers and pallets in modern port terminals makes it necessary to automate the process. What PCL did was to receive the pallet into a receiving area which could be scanned into the database, retrieved therefrom using intelligent data terminals on forklifts namely RDT's – radio data terminals and stowed into predetermined cooling chambers before being directed to the correct vessel with final destination being Japan, Europe or Canada.

At each position in the terminal the pallet with its unique bar code can be traced to any location in the terminal. At peak season once the terminal is full the system is further complicated as the pallet overruns are directed to outlying

cooling stores which also need to be included in the location database. An investment of some R4m in hardware and software together with management enhancements such as labour brokers and forklift contracts and ISO standards all contributed to the successful implementation of PCL to the continuing profitability of the Capespan Group.

A similar example of logistical automation is the new KSIA – King Shaka International Airport including the Dube Tradeport, which was recently described in the Engineering News as "setting new logistics standards for SA". The port utilizes ULD's "unit loading devices" and pallets. When an aircraft arrives at KSIA, the ULD's and pallets are unloaded onto trailers called dollies organised into trains. Once the ULD or pallet reaches the airside, it is automatically assigned a unique number, indicating type of aircraft allowed and flight number. Because everything is digital, every item has a paperless trail. Every item in the facility is archived. Once in the transit shed, the container is picked up by a forklift and carried to another roller conveyor which feeds an ETV – elevated transfer vehicle [1].

The above is a further example of categorical improvement on a similar system implemented to track pallets from one position to another through a typical holding area.

3. FOSKOR

The company of which the IDC – Industrial Development Corporation has the major share made large profits in the years leading to the financial crisis of October 2007 so that two of its expansion projects namely PEP 1&2 were financed without the need to borrow capital. The PEP 1 – Pyroxenite Expansion Project objective was to build a new crusher at the unused south pit and convey the raw material to the existing processing plant some 3km to the north just south of the town of Phalaborwa. The fact that the funds had already been allocated before 2007 meant that the developers escaped the pull back of mine expansion projects after the credit crunch of 2007. The PEP 1 project valued at some R630m was the solution to develop a new open cast pit for Foskor in the south and the conveyance of the material some 3km north to the final raw material processing plant. Foskor with an installed capacity of 75MVA, an electricity bill of some R10m per month, could be considered a major customer of electricity supply utility Eskom. Therefore it was in management's interests to take advantage of its status as major consumer to move more to electrifying most of the processes.

Therefore the crushing process and conveyors that transported the material required an increase of installed capacity of some 10MVA to the existing capacity. A new 40MVA transformer was purchased as well as the provision of two dual overhead power lines to the south crushing plant. The crusher utilizing a 825kW Alstom motor driving a Kawasaki gyratory crusher rated at 5000 tons per hour, through a series of stockpiles and conveyors, eventually supplied the overland conveyor rated at 2000 tons per hour of some 3km in total length with installed capacity of 3500kW.

From the calculation of the above with an overall installed capacity of 75MVA for Foskor and a usage of some 40m kwh per month at R10 500 000, equating to a real value of R3.79 per kwh, the overland conveyor - OLC at 3500kW utilized some R560k per month transporting some 1 million tons of material at R0.56 per ton. The Lectyls, diesel trucks with 100 ton capacity equated to some R2.40 per ton over the 3km distance with an empty return trip. Hence cost savings utilizing the OLC as against diesel consuming Lectyls taking into account factors such as downtime and maintenance, gave Foskor a savings on average of R1m per month in diesel as well as contributing to a cleaner local environment.

4. KAGEM

The mine was designed to run on diesel generation consuming up to 10 000l on any day until the local power utility, namely Zesco of Zambia brought their power lines into close proximity to the mine situated some 50km south of the Copper Belt town of Kitwe. The installed capacity of the mine is some 500kVA equating to 12000kwh per day.

The cost of the diesel at 8000ZMK per litre in Zambia meant a daily bill of 80m ZMK or R100 000. The cost per kwh of the installed capacity for the service would equate to R45 480 @ R3.79 per kwh of installed capacity. Therefore besides the benefits of environmental issues the company will be saving R50 000 per day excluding maintenance on the diesel generators. The electrical installation besides having little effect on the environment except for overhead lines on the boundary needs very little maintenance as modern electrical installations such as that of the PEP 1 project at Foskor is virtually maintenance free.

5. CONCLUSION

The above are examples of typical real life modern solutions to dated technology reliant on traditional means of creating power through the costly and environment threatening carbon based combustible materials. The move to clean power generation by innovation is being driven by an overpopulated world which is becoming environmentally conscious. Unfortunately third world countries such as those in Africa and India will pay the price as others have such as in Europe where forests now have to be recultivated. Due to climate change, African countries such as Ruanda, Burundi and Malawi are affected by low rainfall. There are parts of India where rain has become so scarce as all the trees have been removed and now the population is suffering from ignorant forefathers who ignored the harm they have caused to the environment. Even in Zambia the writer is shocked to see that in a country that is quite green with good rainfall the area is void of any animals as the needs of the local population has been greater than the desire to preserve the environment.

6. REFERENCES

[1] Campbell, K.: "Dube TradePort setting new logistics standards for SA" *Engineering News,* 17 June 2011, pp.1-3

7. AUTHOR

Principle Author: Mr Guy Gibbon holds a degree in Electrical Engineering from the University of Cape Town and a masters degree in Business Leadership from the University of South Africa. At present he is working as Senior Project Manager for Electrical Instrumentation Services in Zambia. He is planning to sit next year for his doctorate in renewable energy sources as a viable alternative to nuclear.

Presenter:

The paper is presented by Mr Guy Gibbon.

DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT

PROPOSED DUBE TRADEPORT TRADE ZONE 2 LOCATED BETWEEN TONGAAT AND THE KING SHAKA INTERNATIONAL AIRPORT IN KWAZULU-NATAL

Prepared for:

Dube TradePort Corporation

[redacted]

dube tradePORT
SOUTHERN AFRICA'S PREMIER AIR LOGISTICS PLATFORM

Submitted to:

Department of Environmental Affairs
Fedsure Building
315 Pretorius Street
Pretoria

Prepared by:

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Tel. No: [redacted]
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S · E · F
STRATEGIC ENVIRONMENTAL FOCUS

DECEMBER 2013

SEF Project Code: 504597
DEA Ref No: 14/12/16/3/3/2/341
NEAS REF NO: DEA/EIA/0001216/2012

PURPOSE OF DOCUMENT

A period of **40 calendar days** (**11 December 2013 – 11 February 2014**) has been provided for public review of the Draft Environmental Impact Report (EIR). All Interested and Affected Parties (I&APs) as well as State Departments have been notified of this review period.

The Draft EIR contains the following information:

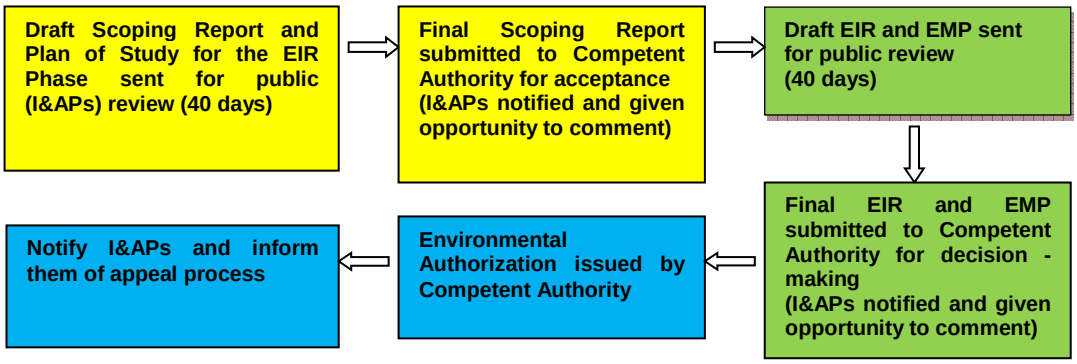
- A description of the project, including project motivation;
- A description of the environment affected by the project;
- The public participation process;
- Discussion of applicable alternatives;
- Assessment of impacts for the construction and operational phases; and
- The EAP's recommendations.

The Draft EIR can be viewed at the following venue:

Name of public venue	Name of Contact Person	Contact Number(s)	Viewing Times
Tongaat Library 1 Victoria Avenue, Tongaat Central, KwaZulu-Natal	Ms. Vigie Padayachee	(032) 944 4734	Mondays (12h00 to 18h00) Tuesdays to Fridays (10h00 to 17h00) Saturdays (08h30 to 12h30)

Should you wish to participate in the S&EIR process by contributing issues and concerns/comments, please register as an I&AP by completing the enclosed Registration and Comment Sheet or you can visit SEF's website at http://www.sefsa.co.za. To register as an I&AP or comment on the project, click on "Stakeholder Engagement". Click on the "register" button and complete the compulsory fields to register as an I&AP. On completion of these fields, you will be logged in. Click on stakeholder engagement under categories on the right hand side of the page. Then click the **Draft EIR for Proposed Dube TradePort Trade Zone 2 Project** to view the report and associated appendices. Should you have any problems in obtaining the information from the Internet, please feel free to contact SEF for assistance.

Following the commenting period, the EIR will be updated and submitted to the Department of Environmental Affairs (DEA) for consideration. The flow diagram below highlights the phases in the project where I&APs have the opportunity to participate within the process.



PROJECT SUMMARY	
Project Name	Proposed Dube TradePort TradeZone 2
Farm Name and Portions	Remainder of Portion 9 of La Mercy Airport No. 15124
Surveyor-General 21 Digit Codes	NOFU00000001512400009
Brief Development Overview	The King Shaka International Airport (KSIA) and Dube Trade Port (DTP) *(collectively termed the 'Airport'*) opened in May 2010. It has been described as far more than a new airport but rather as a stimulator and generator of economic growth for the KZN province and is, therefore, one of the Province's major priorities. The DTP development has been designed as a world class facility of diverse integrated activities that will attract a wide range of aviation-related businesses and investors, operators, users and tenants. The proposed site for this proposed development is approximately 160ha. As part of the Phase 1 development, a portion of the site has been developed for the Trade Zone, Support Zone and the KSIA (including a Cargo Terminal and Valuable Cargo Building) which opened in May 2010 and March 2012, respectively. The existing facility (KSIA and Cargo Terminal) has the capacity for 7.5 million passengers per annum and the capacity to handle 100 000 tons of cargo per annum with the capacity to expand to 2 million tons per annum. The applicant, Dube Trade Port Corporation (DTPC) intends to utilise the remainder of Portion 9 for the purposes of aviation-related activities (*such as repairs and maintenance to aircrafts*) are proposed at the site and light industrial development to be known as TradeZone 2. This would entail creating platforms, servicing the area and releasing it to the market for development. The following land uses are proposed for the Proposed TradeZone 2: • Airside/ cargo terminal; and • Proposed cadastral (*for the proposed light industrial land uses*); • General Aviation area; and • Airforce residential area. Access to the DTP Trade Zone 2 development will be from the Main Spine Road that links Watson Highway/Ushukela Highway to the Airport. The internal roads through the development site will have a road reserve ranging from 15m to 45m in width. In the long-term, it is proposed that Brake Drive must be upgraded to provide access into the DTP Trade Zone 2 Development for the generated traffic volumes. A new link road will be required to link Brake Drive and the Main Spine Road (*currently under construction*) through the DTP development. The proposed access road from Brake Drive will be subject to a separate Environmental Process. Aviation fuel will be stored in tanks to be located within bunded areas of the proposed General Aviation area. A telecommunication mast for aviation-related purposes is proposed. The design and type of telecommunication mast proposed for the Trade Zone 2 will be finalized once the project layout has been finalized. Advertising billboards will be erected at the light industrial land use area. The detail design of the billboards will be available during final design. Should the Developer's preferred layout be implemented, infilling of a significant amount of wetlands will take place on site. To mitigate this impact, the developer intends to rehabilitate wetlands at a candidate offset site occurring north of the study area within the similar Tongaat

	River catchment. The purchase of the candidate site will be dependent on approval of this offset site by the DEA and the key state departments.
Development Footprint	The site is approximately 160 hectares (ha), however, the development footprint is approximately 140ha.
Road Improvements	To mitigate the impact of the development-generated peak hour traffic volumes on the surrounding road network, the following intersection improvements are recommended: • The link capacity of the R102 and uShukela Drive can be increased by providing dual lanes per direction on each link. This should be implemented by eThekwini Transport Authority (ETA)/KwaZulu-Natal Department of Transport (KZN DOT) within 5 years as the existing traffic condition is not favourable. • The existing uShukela Drive / Tongaat off-ramp eastern intersection should be converted into a traffic signal controlled intersection in order to reduce delays experienced by the right turning traffic from uShukela Drive west approach towards Durban, it is recommend that a protected signal phase be provided. • The existing uShukela Drive / Tongaat off-ramp western intersection should be converted into a traffic signal controlled intersection in order to reduce delays experienced by the right turning traffic from off-ramp approach towards Westbrook. It is further recommended that a left slip lane towards Tongaat should be provided. • The new proposed DTP Spine road intersection on uShukela Drive should be signalised. Exclusive turning lanes should be provided as recommended in the Traffic Impact Assessment (see Appendix 6). • The existing intersection of uShukela Drive and R102 should be upgraded as per the TIA (see Appendix 6). • The proposed Brake Drive Link road will be required to intersect with the main DTP Spine Road. This will be subject to a separate Environmental Process. • It is further recommended that the intersection of R102 and Brake Drive should be upgraded. Refer to the recommendations in the TIA in Appendix 6 for thorough details. • The Traffic Impact Assessment should be submitted to the eThekwini Municipality, KZN DOT and SANRAL for approval.
Site Photographs	Appendix 2
Provision of Services:	
Water	Construction Phase: Water will be sourced from the eThekwini Municipality for construction-related activities and this will be supplemented by rainwater harvested from the Trade Zone 1 development. Operational Phase: Water supply to the site will flow by gravity from the Inyaninga Reservoir via the existing bulk water network. The following upgrades to the existing bulk water supply infrastructure are proposed: • The water storage required for the existing and proposed developments that feeds off the Inyaninga Reservoir is estimated to be 8.19 Mℓ, thus a 2.2 Mℓ reservoir may need to be constructed alongside the existing reservoir to make up for the shortfall in the storage available. • In order to cater for fire flows to Trade Zone 2, it is proposed that 575m of the existing supply line leading up to the tie-in point for the new internal reticulation system be upgraded from a 200 mm Class 12 uPVC pipe to a 315 mm Class 12 uPVC pipe. Upgrades to the external bulk water supply infrastructure are required. Internal reticulation water pipelines ranging from 110mm in diameter to 315mm in diameter will be constructed through the development site. Water to each erven within the development site will be individually metered.
Stormwater Attenuation	The stormwater system for the proposed Trade Zone 2 development is required for the collection, management and control of stormwater run-off from the proposed site. In accordance with the National Building Regulations “PART R Stormwater Disposal SABS 0400 – 1990”, the eThekwini

	municipal policy requires that privately owned sites may be required to manage and make provision for their own stormwater runoff. The general level of management required is that of controlling all runoff emanating from such a site in excess of that which would have occurred if the site was in its natural or original state. Such stormwater management may well be the provision of soak pits, structures such as attenuation ponds or tanks (with controlled outlets where necessary), all to ensure that the rate of runoff is reduced to pre-development states and that runoff is not concentrated onto adjacent neighbouring sites or other infrastructure, be it road drainage or valley lines, streams, etc. The designated catchment areas and the run-off was determined separately for each catchment area occurring within the development site. i.e. Catchment areas 1 to 5. Stormwater run-off from catchment areas 1 to 4 are proposed to drain into designated proposed attenuation ponds and the stormwater run-off from Catchment Area 5 and the Maintenance, Repair, Overhaul (MRO) will drain directly into the Hlawe River at the Watson highway culvert through energy dissipation measures implemented at the outflow. Two attenuation ponds are to be designed to attenuate flows from the proposed development. The attenuation ponds will be sized using the pre and post development method, and have been sized to retain water for flood events which are in excess of the pre- development run off using the 1: 50 year flood run-off volumes. The attenuation ponds are described below: • Attenuation Pond 1 is situated south-west of the proposed development inside the tributary stream. This pond will attenuate stormwater from Catchment Area 1 and 2 as well as stormwater from Trade Zone 1. The pond has been sized to have a capacity of 83 ML. • Attenuation Pond 2 is situated north-west of the proposed development and will attenuate stormwater from Catchment Areas 3 and 4 as well as the MRO. The pond has been sized to have a capacity of 58 ML. **Internal Stormwater Drainage** The storm water control philosophy will be to restrict post-development flows into the Hlawe River. In order to achieve this, it is intended to provide a 'sustainable drainage system' in line with international best practice. This will be achieved by a combination of on-site attenuation tanks for roof run-off, permeable paving to parking areas, and unpaved areas, etc. Excess stormwater run-off will be accommodated in the roadway drainage, which will drain into the bulk stormwater system. The stormwater system consists of combined surface, road and pipe systems. In order to determine surface water run-off, probabilistic relationships between the average daily rainfall, rainfall intensity, duration and return period are required.
Sewage	Construction Phase: Portable chemical toilets will be provided for construction workers. Operational Phase: The Northern Waste Water Treatment Works, which the Trade Zone 1 area drains into, has a capacity of 1.3Ml and was initially designed as a temporary solution for the bulk sewerage treatment in the area, due to capacity constraints of the Tongaat Waste Water Treatment Works. The bulk sewerage for the Northern areas of KSIA thus, does not discharge into any municipal system and is treated on site at the Northern Waste Water Treatment Works. The internal sewer drainage network which will service the proposed DTP Trade Zone 2 development stands have been designed as a self-cleansing gravity sewer system which will drain all the stands and transport all sewerage outflow into the bulk sewer drainage system. The internal reticulation sewer pipe size will range from 110mm to 160mm. An external bulk sewerage pipeline system which will drain the entire existing KSIA area and also the proposed development areas of Trade Zone 2 (including the MRO facility) is required. The bulk sewer pipeline alignment will allow the sewerage to be transported to the Tongaat Waste Water Treatment Works.

	The flow calculated to be currently discharging into the Northern Treatment Works is approximately 48.1l/s. The total sewerage flow from the proposed development, which will thus have to be accommodated in the bulk external sewer pipeline to the Tongaat Waste Water Treatment Works, will be that of the existing flows plus the proposed development flows, which amounts to a total flow of 79.27l. With a flow of 79.27l, a pipe size of 315mm is required to drain the KSIA and the proposed development. A bulk sewer pipeline size of 500mm diameter, which enlarges to a 600mm wide pipe, is required to transport the sewerage flows toe the Tongaat Waste Water Treatment Works. These demands and pipe sizing will be retained in the revised bulk sewer pipeline to the Tongaat Waste Water Treatment Works. Two options were assessed as part of the Basic Assessment process for transportation by the Hlawe River Bulk Sewer Pipeline as follows: ***Engineering and preferred Alternative:*** A pipe size of 250mm is proposed to provide a gravity pipeline from the Agrizone development, which is proposed to connect to the Hlawe River Bulk Sewer line. However, this alternative is on hold due to non-compliance of that alignment with the KSIA Appeal Decision, as the proposed bulk sewer line was to traverse the 'conservation area'. ***Environmental Alternative:*** The proposed alternative includes a pump station and sump system that are to be constructed at the Agrizone. The sewer network from the Agrizone development will discharge into the sump, from where it will be pumped with a 200mm diameter uPVC pipe to an inception chamber manhole that would be located at the Tradezone 2 development. The pump station at the Agrizone development, will have a level switch which will activate the pump, once it reaches a certain level. The river will have to be crossed at a point along the route of the pumping main from the Agrizone pump station to the TradeZone 2 inception chamber manhole. At the river crossing, the pipe will be encased in concrete to protect the pipe from being damaged. The inception chamber manhole will be constructed out of concrete with the 200mm diameter pressurised pipeline coming in at a high level and a 500mm diameter uPVC gravity pipeline leaving the chamber at a lower level. With the incoming pipe being at a higher level than the outgoing pipe, it will allow the sewer to start gravitating to the next position once it reaches the inception chamber. The gravity 500mm pipeline will run along the edge of the platform and it will cross the river at the same point as the new proposed road and will run along the route as proposed by the previous Hlawe river bulk sewer pipeline system to the Tongaat Waste Water Treatment Works (WWTW).
Electricity	Construction Phase: Diesel Generators will be used. Operational Phase: The design and installation of the bulk electricity supply will be done by eThekwini Electricity. The following is anticipated regarding electrical reticulation: • 11kV supplies will be taken from the existing 132/11kV major substations and distributed along the main access roads to the Trade Zone 2 development. They will feed a series of distribution substations. • Distribution substations will be planned and positioned in key locations throughout the development. • 1kV cable routes will be planned to run in the road reserves adjacent or in close proximity to each proposed site, allowing sales and transfers of sites to take place. • Sites that require more than a 1MVA supply will be serviced by a substation (brickwork

	structure). • Smaller sites will either be equipped with their own mini-sub or supplied by a 400V feed from a shared substation (brickwork structure). **Internal electrical reticulation and supply** Internal reticulation and street lighting: • Internal reticulation will be performed by eThekwini Electricity. They will provide a metered supply at the boundary of each serviced stand. • Street lighting as well as public open space lighting will be designed according to SANS 10098.
Solid Waste	Construction Phase: The Contractor will be responsible for the management and removal of all solid waste (refer to the Environmental Management Programme (EMPr) in Appendix 7. Operational Phase: The development falls within the jurisdiction of eThekwini Municipality, and therefore Durban Solid Waste (DSW) will be responsible for provision of waste collection. **WASTE MANAGEMENT AND DISPOSAL** The comprehensive solid waste management plan will include, but not be limited to the following: • Contribution areas within the development. • Type of waste generation for the contribution areas. • Basic estimation of waste streams identified and waste volumes will be determined. • Potential recyclable waste streams will be highlighted. Based on this information, a recommendation will be given if the site should have a waste sorting facility or only a temporary waste storage area. **DESIGN CRITERIA** Based on the recommendation whether a waste sorting facility or temporary waste storage area will be needed, a design will be submitted to accommodate the type of waste area needed for the site. According to the Red Book guidelines, occupancy for buildings is one person per 50m².
Telecommunication	DTPC currently manages all telecommunication data services in the adjacent area. A data centre currently exists at the Trade Zone Cyber port. The current existing DTPC design principles and data network distribution criteria to all sites with-in the Dube Trade Port Aerotropolis will apply. **TELECOMMUNICATION AND DATA NETWORKS AND INFRASTRUCTURE** • Sleeves will be installed alongside the internal roads, connecting the cyber port to all serviced stands. • Sleeves will be terminated in a manhole at the boundary of each stand. • A minimum of 4 x 110mm sleeves will be installed with draw boxes at anticipated tie-ins and road crossings. Draw boxes will not be installed more than 200m apart. • 3 x 40mm cable tubes will be installed in two of the four sleeves.

ENVIRONMENTAL ASSESSMENT PRACTITIONER

Strategic Environmental Focus (Pty) Ltd (SEF) is a privately owned company and was formed in 1997 with the objective of providing **expert solutions to pressing environmental issues. SEF is one of Africa's largest multi-disciplinary consultancies**, offering sustainable environmental solutions to private and public sector clients. With our integrated services approach in the management of natural, built and social environments; and with over a decade of experience, we bring a wealth of knowledge and expertise to each project.

SEF's Vision

SEF offers holistic and innovative sustainable solutions in response to global challenges.

SEF's Mission

SEF is a national sustainability consultancy which provides integrated and innovative Social, Biophysical & Economic solutions while fostering strategic stakeholder relationships, underpinned by SEF's core values.

SEF has assembled a team of professionals, consisting of a core of environmental experts with extensive experience in dealing with Environmental Impact Assessments (EIAs), Public Participation Processes, Architectural and Landscape Architecture, Mining and Environmental Management. SEF also has a team of specialist practitioners such as specialists in Heritage Impact Assessments (HIA), Wetland Delineation and Functional Assessments; Wetland/ Riparian Rehabilitation, Aquatic Assessments; Ecological (Fauna, Avifauna and Flora) Assessment, Visual Impact Assessments (VIAs), Soils and Agricultural Potential Assessments, Socio-Economic Assessments, etc.

SEF is a Qualifying Small Enterprise and a **Level 2 contributor in terms of the Broad Based Black Economic Empowerment** Act, 2003 (Act No. 53 of 2003) and has a procurement recognition level of 135%.

SEF commits itself to comply with the requirements and the implementation of a Quality Management System. The Quality Management System will be reviewed and implemented to continually improve efficiency and effectiveness of the organisation.

SEF uses a "green" approach to anything we embark on. We believe in using technology to our and the environment's best advantage. We encourage the use of green alternatives such as telephone and video conferencing instead of travelling for workshops and meetings and CDs instead of printed material, where possible.

The following project team members are involved in this S&EIR application process.

Table 1: Project Team Members

Name	Organization	Project Role
Mr. Mark Ryan	SEF	Project Manager
Ms. Natasha Lalie	SEF	Environmental Manager

Mr Mark Ryan

Mr Mark Ryan is an environmental consultant at SEF with seven (7) years' experience in Environmental Impact Assessment. Mark has special interest in EIA, environmental auditing and strategic environmental processes such as Environmental Management Frameworks. Mark has a Master of Social Science Degree (M.Soc.Sci) in Geography and Environmental Management from the University of KwaZulu-Natal. Mark is responsible for conducting environmental impact assessments for a wide range of projects that involve wastewater treatment plants, infrastructure such as bridges and roads, bulk water pipeline projects, residential and mixed use developments. Mark has experience in project management and administration as well as the planning and compilation of Scoping Reports, Environmental Impact Reports and Environmental Management Plans. Mark also has experience in environmental auditing of construction activities such as residential developments, office parks and golf courses.

Ms Natasha Lalie

Natasha has an MSc. Environment and Society and has been an Environmental Assessment Practitioner (EAP) for almost nine years. She has undertaken numerous Scoping Reports, Environmental Management Programmes (EMP's) and Exemption Applications, as required by the Environment Conservation Act, 1989 (Act No. 73 of 1989); Environmental Screening and Feasibility Studies; and S&EIRs as well as Basic Assessments (BAs), as required by NEMA and the EIA Regulations. She has been involved in a wide range of projects, which include waste management, industrial, township establishments, mixed-use development, road upgrades, infrastructure developments, change of land use, lodge developments, proposed bulk water pipelines, proposed transmission power lines, proposed filling stations, shopping centre developments and so on.

Table 2: Contact Details of Environmental Assessment Practitioner

Name	Contact Details
Mr. Mark Ryan	Strategic Environmental Focus (Pty) Ltd Postal Address: [redacted] Tel: [redacted] Fax: [redacted] Email: [redacted]

EXECUTIVE SUMMARY

1 INTRODUCTION

Strategic Environmental Focus (Pty) Ltd as independent environmental consultants were appointed by Dube TradePort Corporation (Project Applicant) to conduct the Scoping and Environmental Impact Reporting (S&EIR) process for the proposed construction of Dube TradePort TradeZone 2 on the remainder of Portion 9 of La Mercy Airport No. 15124 near La Mercy within the eThekwini Municipality KwaZulu-Natal.

The Scoping Phase for the proposed project has been completed and the Final Scoping Report and Plan of Study for the EIR were submitted to the Department of Environmental Affairs (DEA) on the 27 August 2012. Approval to proceed to the EIR phase was received on 8 November 2012.

The purpose of this Draft Environmental Impact Report is to provide all interested and affected parties (I&APs) and relevant State Departments with an opportunity to comment and provide input into the process going forward. All comments received during the review and commenting phase will be incorporated into the Final Environmental Impact Report for consideration by the approving authority, DEA.

2 BRIEF PROJECT DESCRIPTION

The KSIA and DTP (collectively termed the 'Airport') opened in May 2010. It has been described as far more than a new airport but rather as a stimulator and generator of economic growth for the province and is, therefore, one of the Province's major priorities. The DTP development has been designed as a world class facility of diverse integrated activities that will attract a wide range of aviation-related businesses and investors, operators, users and tenants. The proposed site for this proposed development is approximately 160ha. As part of the Phase 1 development, a portion of the site has been developed for the Trade Zone, Support Zone and the KSIA (*including a Cargo Terminal and Valuable Cargo Building*) which was opened in May 2010 and March 2012, respectively. The existing facility *(KSIA and Cargo Terminal*) has the capacity for 7.5 million passengers per annum and the capacity to handle 100 000 tons of cargo per annum with the capacity to expand to 2 million tons per annum. The DTP Corporation intends to utilise the remainder of Portion 9 for the purposes of aviation-related activities (*such as repairs and maintenance to aircrafts*) are proposed at the site and light industrial development to be known as Trade Zone 2. This would entail creating platforms, servicing the area and releasing it to the market for development.

The following land uses are proposed for the Proposed TradeZone 2:

- Airforce residential areas;
- Proposed cadastral (*light industrial land use*);
- Airside / cargo terminal; and
- General Aviation areas.

The 'conservation area' illustrated on the northern portion of the site is the 'offset area' for the KSIA/DTP Phase 1 development. There will be no development within the 'conservation area'.

Access to the DTP Trade Zone 2 development will be from the Main Spine Road that links Watson Highway/Ushukela Highway to the Airport. The internal roads through the development site will have a road reserve ranging from 15m to 45m in width.

In the long-term, it is proposed that Brake Drive must be upgraded / constructed to provide access into the DTP Trade Zone 2 Development for the generated traffic volumes. In addition, the new link road will be required to link Brake Drive and the Main Spine Road (*currently under construction*) through the DTP

development. The proposed access road from Brake Drive will be subject to a separate Environmental Process.

Aviation fuel will stored in tanks to be located within bunded areas of the proposed General Aviation (GA) area.

A telecommunication mast for aviation-related purposes is proposed on the site. The design and type of telecommunication mast proposed for the Trade Zone 2 will be finalized once the project layout has been finalized.

Advertising billboards will be erected at the light industrial land use area. The detail design of the billboards will be available during final design.

TradeZone 2 is zoned Undetermined as per the eThekwini North Scheme. On receipt of the EA, a rezoning application to General Industry will be undertaken.

The controls as per Undetermined Zone are as follows:
Floor Area Ratio (FAR):0.5
Percentage Coverage: 30%
Minimum Lot Size: 2 000m^2
Building Line: 7.5m
S/SPACE: 5.0m

Controls as per General Industry Zone:
FAR: 1.0
Percentage Coverage: 70%
Minimum Lot Size: 1 800 m^2
Building Line: 7.5m
S/SPACE: 2.0m

There will be total infilling of all the wetlands on the site for the proposed development, should the developer's preferred layout alternative be approved. Wetland Consulting Services (WCS) were appointed to compile the wetland delineation, offset and rehabilitation strategy report to assess the offsets. This will be explained in Section B-1.3 of the Draft EIR. To mitigate this impact, the proponent intends to rehabilitate wetlands at a candidate offsite site. A candidate site has been identified that occurs north of the study area, within the same catchment as the study site i.e. Tongati River Catchment. In total, the wetlands within the study site represent 30.0 hectare equivalents of functional wetland area. To ensure a no-net-loss of wetland functional area from the local landscape, a gain of 30 ha-eq of wetland ecological integrity needs to be obtained through the successful rehabilitation of the candidate wetlands. Through successful wetland rehabilitation, the ecological integrity of the wetlands of the candidate site will be improved. This could potentially yield a gain of 49.4ha-eq.

A Traffic Impact Study (refer to Appendix 6) was conducted by Aurecon South Africa (Pty) Ltd for the proposed development. To accommodate the anticipated traffic calculated by the study the following intersection improvements are recommended:

- The link capacity of the R102 and uShukela Drive must be increased by providing dual lanes per direction on each link. This should be implemented by eThekwini Transport Authority (ETA)/KZN Department of Transport (KZN DOT) within 5 years as the existing traffic condition is not favourable.
- The existing uShukela Drive / Tongaat off-ramp eastern intersection should be converted into a traffic signal controlled intersection in order to reduce delays experienced by the right turning traffic from uShukela Drive west approach towards Durban, and it is recommended that a protected signal phase be provided.

- The existing uShukela Drive / Tongaat off-ramp western intersection should be converted into a traffic signal controlled intersection in order to reduce delays experienced by the right turning traffic from off-ramp approach towards Westbrook. It is further recommended that a left slip lane towards Tongaat should be provided.
- The new proposed DTP Spine road intersection on uShukela Drive should be signalised. Exclusive turning lanes should be provided as recommended in Chapter 11 of the TIA.
- The existing intersection of uShukela Drive and R102 should be upgraded as per Chapter 11 of the TIA.
- The proposed Brake Drive Link road is required to intersect with the main DTP Spine Road (*will be subject to a separate Environmental Application*). It is further recommended that the intersection of R102 and Brake Drive should be upgraded in order to accommodate the expected development traffic. Refer to Chapter 11 of the TIA for thorough details.
- The TIA has been submitted to the eThekwini Municipality and KZN DOT for comment and approval.

3 KEY IMPACTS

The following key impacts were identified during the Scoping Phase and were further investigated and assessed within this EIR.

Biophysical Impacts:

- Impact on ground and surface water due to hydrocarbon spillages during both the construction and operational phases of the development;
- Impact on wetlands and riparian areas due to creation of platforms during construction;
- Loss of wetland ecosystem and habitat through infill;
- Potential for soil erosion due to soil compaction and increased surface water run-off associated with establishment of hard internal surfaces and vegetation clearing during construction and operational phases;
- Impact on loss of flora/fauna as a result of construction activity such as vegetation clearing;
- Impact on avifauna as a result of the proposed aviation-related activities; and
- Impact on geological formations as a result of the proposed development;

Socio-Economic Impacts:

- Potential loss of viable and high potential agricultural land;
- Impact of air pollution caused by dust during construction;
- Impact of noise caused by construction activity;
- Impacts on heritage resources and culture;
- Impact on safety and security;
- Job creation during the construction and operational phases of the proposed project.
- Impacts on localised traffic;
- Impact on existing services;
- Compatibility with the municipal plans; and
- Impact on visual character.

Cumulative Impacts:

- Increased loss of viable and high potential agricultural land;
- Economic growth in the region;
- Cumulative impact of the proposed development and other developments within the KSIA/DTP Precinct;
- Increased traffic associated with additional road users; and
- Cumulative net loss of wetlands on site and total loss of wetland habitat in the KSIA/DTP development precinct.

4 PROJECT ALTERNATIVES

To give effect to the principles of NEMA and Integrated Environmental Management (IEM), an EIA should assess a number of reasonable and feasible alternatives that may achieve the same end result as that of the preferred project alternative. The following alternatives have been identified as part of this EIA:

Site/ Location Alternatives:

The developer owns the site which is strategically located and in close proximity to the Phase 1 of DTP and the KSIA. The development of the site would therefore be compatible with the adjacent land uses.

Development Layout Alternatives:

Alternative 1: Developer's Preferred Layout

This would entail the total infilling of the wetlands and drainage lines on the site to cater for a maximum developable area (refer to the Layout Plan in Appendix 3).

Alternative 2: Environmental Preferred Layout

This would entail the implementation of a buffer width of 30m from the wetlands and drainage lines on site to maintain the ecological processes associated with the water resources on site and minimise the negative impacts on the downstream hydrological systems. The reduced development footprint will render the site unfeasible for the proposed TradeZone 2 Master Plan, due to insufficient space allocation which is required for General Aviation, Light Industry and the Airside/cargo terminal (Refer to the Layout Plan in Appendix 3).

Land Use Alternatives

Alternative 1: The Preferred Alternative is to develop the ~160ha site into light industrial area, General Aviation and airside/cargo terminal to complement the existing adjacent infrastructure constructed during the Phase 1 KSIA/DTP development, including the MRO and the Watson Highway Link Road currently under construction The remaining area on site would accommodate service roads and supporting services infrastructure.

Alternative 2: Would make allowance for only one land use on the entire site. As such, instead of the proposed development being divided to accommodate open spaces, various tenant specifications and service roads; the entire site would be developed for heavy industries only.

Alternative 3: Would make allowance for a layout that would accommodate both light industrial and residential use within TradeZone 2.

No Development Alternative

The 'no-go' or 'do nothing' alternative would be applicable if the proposed development is not approved by the DEA and the status quo of the site will remain. This option assumes that a conservative approach would ensure that the environment is not impacted upon any more than is currently the case. It is important to state that this assessment is informed by the current condition of the area. Should the proposed development not be undertaken, the study area will not be affected by any construction-related or operational phase impacts. Therefore, the present state of the biophysical, social and economic environment will remain, unaffected.

The site would remain undeveloped and commercial sugar cane farming would continue. The proposed general aviation associated Maintenance Repair Overhaul (MRO) facility and the new link road between the Cargo Terminal and uShukela Drive (formerly Watson Highway) would however, be underutilized. Refer to Appendix 3 for an illustration of the MRO facility in relation to the site boundary for DTP TradeZone 2. In addition to servicing the needs of the Cargo Terminal and Trade Zone area, the link road has been designed to accommodate additional traffic from surrounding areas earmarked for development. Against this background, this alternative would have huge implication for the infrastructure investment already made in the area.

The airport is anticipated to provide opportunities for new trade, a logistics gateway, additional cargo freight, direct international flights and an increased number of passengers in the long-term. Should the Trade Zone 2 development not take place, there would be no infrastructure to support the expansion of the airport to meet its provincial goals of growth in the economy. The investment made in Phase 1 of the KSIA/DTP development will not be fully utilized and supported. The province would stagnate in growth of the airport due to the lack of adequate infrastructure.

Failure to construct the Trade Zone 2 development will not unlock opportunities for economic and employment opportunities in the Greater La Mercy area and will not contribute to the Dube Aerotropolis1 development plans.

The DTP has been identified as a key development node in the north, and this is evident in the eThekwini Municipality's IDP, as well as the northern spatial development plan, and the Tongaat/DTP LAP. In the absence of the Trade Zone 2 development, there would be stifled growth, not only in the northern region of the Municipality but also in the Southern African region, since the airport's international status will be undermined.

In the absence of the proposed TradeZone 2 development, there would be no need for additional services infrastructure such as the proposed 2.2Ml reservoir to provide water to the proposed development. In addition, there would not be the need for the construction of additional bulk sewer pipelines to the Tongaat Waste Water Treatment Works (WWTW) to cater for the increased demand in sewerage requirements. The present status quo in terms of stormwater run-off would prevail and there would be no need for the construction of attenuation ponds. There would not be any pressure on the eThekwini Municipality to collect waste that would have been generated at the Trade Zone 2 development, if it were constructed and became fully operational.

The anticipated road upgrades that are envisaged by Traffic Engineer would not be required, should the Trade Zone 2 development not go-ahead.

There would not be any destruction of additional habitats, as there would not be any infilling of wetlands and drainage lines associated with the Trade Zone 2 development site. With the implementation of on-site rehabilitation measures to re-instate the wetlands and drainage lines, there would be increased biodiversity on the site. On the contrary, should the development not be approved, there could be a missed opportunity for rehabilitation of Hlawe River associated wetlands and riparian zones.

5 CONCLUSIONS AND RECOMMENDATIONS

In accordance with GN No. 543, the Environmental Impact Phase is aimed at identifying and assessing potential impacts caused by the proposed development. The ability to mitigate any of the identified impacts are also addressed and summarised into a working / dynamic Environmental Management Programme (EMPr) for consideration by I&APs and ultimately by the DEA.

Comments and/or concerns identified by Interested and Affected Parties (I&APs) during the review period of the Draft Environmental Impact Report will be incorporated into the Final Environmental Impact Report which will then be submitted to the DEA for consideration.

Two layout alternatives have been presented in the Draft EIR i.e. Environmentally Preferred Layout and the Developer's Preferred Layout.

1) Environmentally Preferred Alternative:

- The Environmentally Preferred Layout allows for non-encroachment of infrastructure into the wetlands, drainage lines and their associated 30m buffer area. The watercourses on site must be rehabilitated to allow for the increased biodiversity on site. This would also ensure that the hydrological flow patterns downstream of the site is not altered and the water courses are not

[1] KSIA is a core piece of infrastructure with access to sea, road and rail linkages, within one of Southern Africa's strongest regional economies.
DTP development strategy will guide the development of the entire Airport City and create significant opportunities for all businesses in surrounding area (www.thdev.co.za/developments/aerotropolis/overview).
An Aerotropolis is a new layout of urban form comprising of aviation intensive businesses and related enterprises extending up to 25 kilometres outward from major airports (http//:en.wikipedia.org/wiki/Aerotropolis).

polluted. This measure would be in line with the conditions of the KSIA Appeal Decision for the broader KSIA/DTP Development Precinct.

- This alternative is similar to the no-go alternative as there would be a reduced development footprint that would render the proposed TradeZone 2 development unviable for development, as there would be insufficient space for land uses such as General Aviation, Cargo Terminal and light industrial development.

2) Developer's Preferred Alternative:

- Should the Developer's preferred layout be approved, then all the wetlands on site will be infilled / lost as a result of development activities such as platforming and the construction of both bulk infrastructure and top structures on the site.
- To mitigate the loss of wetlands, the proponent intends to rehabilitate wetlands at a candidate offsite site. A candidate site has been identified that occurs north of the study area, within the same catchment as the study site i.e. Tongati River Catchment. In total, the wetlands within the study site represent 30.0 hectare equivalents of functional wetland area. To ensure a no-net-loss of wetland functional area from the local landscape, a gain of 30 ha-eq of wetland ecological integrity needs to be obtained through the successful rehabilitation of the candidate wetlands. Through successful wetland rehabilitation, the ecological integrity of the wetlands of the candidate site will be improved. This could potentially yield a gain of 49.4ha-eq.

Should the developer's preferred layout be adopted, the following recommendations are suggested:

- Should the Provincially Protected Plants be removed, relocated or destroyed as a result of the proposed development, a permit from the Provincial Department of Agriculture, Forestry and Fisheries (DAFF) must be sought and approved. It is recommended that the Provincially Protected Plants be relocated to the 'conservation area' adjacent to the northern boundary of the site.
- In view of the close proximity of the proposed development to the airport, it is recommended that the design of the buildings within the study area incorporate noise reduction principles to minimize noise impacts on the occupants. Therefore, residential development is not recommended as an alternative for the proposed development. Industrial development and associated aviation-related activities are compatible land-uses that will complement the adjacent KSIA and DTP.
- There are requirements for additional services infrastructure to be constructed that fall outside of the site boundary of the Trade Zone 2 development site. It is therefore suggested that the following proposed services infrastructure form part of a separate Environmental Application for approval by the DEA:
  - Proposed 2.2Ml reservoir;
  - Bulk sewer pipelines;
  - Stormwater attenuation ponds
- The TIA recommendation to construct a Link Road from Brake Drive to the New Spine Road must form part of a separate Environmental Application.
- The developer must provide high standard traffic warnings and traffic calming measures where construction activities interfere with traffic.
- The fuel storage areas at the General Aviation area must be clearly demarcated and restricted to designated staff only. The fuel storage area must be adequately bunded to ensure that no contamination of underground water and catchment areas occurs.
- The transport, handling and storage of hazardous substances must comply with all the provisions of the Hazardous Substances Act, 1973 (Act No. 15 of 1973), associated regulations as well as SANS 10228 and SANS 10089 codes.
- A Contingency Plan must be put into place in case of leakages or spillages which are not detected and then lead to the contamination of underground water. Leak detectors on pressure systems must be included.
- Monitoring of volumes of the tanks must take place on a daily basis to detect unexplained losses due

to leakages.

- In the event of a spill, hazardous material may be generated. Such material must be disposed of at a suitably licensed waste disposal facility, with chain of custody documentation supplied as proof of end recipient.
- Hazardous and flammable substances must be stored and used in compliance with the applicable regulations and safety instructions.
- The 'conservation area' to the north of the site boundary must be clearly demarcated and there must be no encroachment of construction crew into this area. Stockpiles, construction vehicles and equipment, construction rubble etc, must not occur within the 'conservation area'. Prior to construction, the importance of the 'conservation area' and must be included in the Environmental Awareness Programme that the construction crew must be inducted on,
- The proposed development is in line with the local policies and guidelines such as the eThekwini Municipality's IDP, Northern Spatial Development Plan (NSDP), as well as the Tongaat/DTP Local Area Plan (LAP). Furthermore, a development framework plan for the expansion of the site has been prepared and approved by the local authority in 2008. The further development of the Trade Zone is in line with this plan.
- The proposed development will also contribute to local economic development and provide various employment opportunities to the local people with the eThekwini Municipality.
- In terms of agricultural activities and current land use, the impacts of the land use change is considered to be negligible on the surrounding areas.
- The site is generally stable and suitable for development, provided the recommendations as given in the Geotechnical Report are adhered to. It is recommended that a Geotechnical Engineer be appointed to inspect and approve all cut slopes, and cut and fill heights greater than 2m.

Having presented the two layout alternatives, the DEA is requested to approve the layout alternative that is based on the principles of sustainable development.

The applicant motivated for the Preferred Alternative by mitigating the infill of wetlands through the rehabilitation of wetlands at a candidate offset site. These wetlands have been identified as a National Ecosystem Priority Area and critical in terms of Ezemvelo Conservation Plan. Rehabilitation of the wetlands within the site may potentially improve the integrity of the wetlands to the extent that the number of hectare equivalents may be increased to 103.6ha. This is a potential gain of 49.4ha-eq, after a conservative estimate of the post-rehabilitation ecological state of the candidate wetlands.

This will appropriately achieve the no-net-loss functional area target, as well as provide leeway for any potential risk of failure of certain interventions.

The candidate site is considered appropriate and suitable for achieving both the wetland functioning target offset and the biodiversity target offset for the proposed development.

The DTP has been identified as a key development node in the north, and this is evident in the eThekwini Municipality's IDP, as well as the northern spatial development plan, and the Tongaat/DTP LAP. Should the proposed development not proceed with the Developer's Preferred Layout, there would be stifled growth, not only in the northern region of the Municipality but also in the Southern African region, since the airport's international status will be undermined. The Trade Zone 2 development forms part of the Greater KSIA/DTP Master Plan for growth of the Province, employment opportunities and the economy and the proposed infrastructure at TradeZone 2 would provide support to Phase 1 of the KSIA/DTP development. The proposed

development's key role in the Dube Aerotropolis[2] development plans must be considered in the DEA's Environmental Decision.

A variety of mitigation measures have been identified that will serve to mitigate the scale, intensity, duration or significance of the impacts that have a low to medium, medium to high and high significance rating. These include guidelines to be applied during the construction and operational phases of the project. The EMPrs (Appendix 7) contains more detailed mitigation measures.

To ensure that identified negative impacts are minimised and positive impacts enhanced, the following clauses are recommended as conditions of the Environmental Authorisation:

- The EMPr is a legally binding document and the mitigation measures stipulated within the document and EIR must be implemented.
- An independent Environmental Control Officer (ECO) must be appointed to manage the implementation of the EMP during the construction phase. Environmental Audit Reports must be compiled and made available for inspection.

[2] KSIA is a core piece of infrastructure with access to sea, road and rail linkages, within one of Southern Africa's strongest regional economies.
DTP development strategy will guide the development of the entire Airport City and create significant opportunities for all businesses in surrounding area (www.thdev.co.za/developments/aerotropolis/overview).
An Aerotropolis is a new layout of urban form comprising of aviation intensive businesses and related enterprises extending up to 25 kilometres outward from major airports (http//:en.wikipedia.org/wiki/Aerotropolis).

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LIST OF ABBREVIATIONS AND ACRONYMS

AEL	Air Emissions Licence
BA	Basic Assessment
CRR	Comments and Responses Report
DEA	Department of Environmental Affairs
DAFF	Department of Agriculture, Forestry and Fisheries
DWA	Department of Water Affairs
DTPC	Dube TradePort Corporation
DTP	Dube TradePort
DSW	Durban Solid Waste
DNSDP	Draft Northern Spatial Development Plan
DNL	Day Night Average Sound Level
EAP	Environmental Assessment Practitioner
EA	Environmental Authorisation
ECO	Environmental Control Officer
ETA	Ethekwini Transport Authority
EIA	Environmental Impact Assessment
EIR	Environmental Impact Reporting
EMPr	Environmental Management Programme
FEPA	Freshwater Ecosystem Priority Area
GA	General Aviation
GDP	Gross Domestic Product
GN	Government Notice
ha	Hectares

HIA	Heritage Impact Assessment
HGM	Hydro geomorphic Unit
I&APs	Interested and Affected Parties
IDP	Integrated Development Plan
IEM	Integrated Environmental Management
IUCN	World Conservation Union
KSIA	King Shaka International Airport
KPI	Key Performance Indicator
KZN DAEA	KwaZulu-Natal Department of Agriculture and Environmental Affairs
KZN DoT	KwaZulu-Natal Department of Transport
LAP	Local Area Plan
MRO	Maintenance Repair Overhaul
MAP	Mean Annual Precipitation
MAT	Mean Annual Temperature
ME	Mitigation Efficiency
mm	Millimetres
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NAD	Northern Attenuation Dam
NEMWA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
NEMPAA	National Environmental Management Protected Areas Act
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999)
NUDC	North Urban Development Corridor
NSBA	Northern Spatial Biodiversity Act
NSDP	Northern Spatial Development Plan

NWA	National Water Act, 1998 (Act No. 36 of 1998)
PGDS	Provincial Growth and Development Strategy
PSEDS	Provincial Spatial Economic Development Strategy
PES	Present Ecological State
PoS	Plan of Study
QDGC	Quarter Degree Grid Cell
SAHRA	South African Heritage Resources Agency
SEF	Strategic Environmental Focus (Pty) Ltd
SFM	Significance Following Mitigation
S&EIR	Scoping and Environmental Impact Reporting
SDF	Spatial Development Framework
SARCA	South African Reptile Conservation Assessment
SANRAL	South African National Roads Agency Limited
SAHRA	South African Heritage Resources Agency
SUDS	Sustainable Urban Drainage System
TIA	Traffic Impact Assessment
VIA	Visual Impact Assessment
WOM	Without Mitigation Measures
WM	With Mitigation Measures
WF	Weighting Factor
WWTPP	Waste Water Treatment Package Plant
WWTW	Waste Water Treatment Works

GLOSSARY OF TERMS

Applicant	Any person who applies for an authorisation to undertake an activity or to cause such activity to be undertaken as contemplated in sections 24(5), 24M and 44 of the National Environmental Management Act, 19998 (Act No. 107 of 1998).
Ecology	The study of the interrelationships between organisms and their environments.
Environment	The surroundings within which humans exist and that are made up of – (i) the land, water and atmosphere of the earth; (ii) micro-organisms, plant and animal life; (iii) any part or combination of (i) and (ii) and the interrelationships among and between them; and (iv) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and wellbeing.
Environmental Impact Assessment	Systematic process of identifying, assessing and reporting environmental impacts associated with an activity and includes basic assessment and S&EIR.
Environmental Management Programme	A working document on environmental and socio-economic mitigation measures, which must be implemented by several responsible parties during all the phases of the proposed project.
Interested and Affected Party	Any person or groups of persons who may express interest in a project or be affected by the project, positively or negatively.
Key Stakeholder	Any person who acts as a spokesperson for his/her constituency and/or community/organization, has specialized knowledge about the project and/or area, is directly or indirectly affected by the project or who considers himself/herself a key stakeholder.
Stakeholder	Any person or group of persons whose live(s) may be affected by a project.
Study Area	Refers to the entire study area encompassing all the alternatives as indicated on the study area or locality map.
Succession	The natural restoration process of vegetation after disturbance.
State Department	Any department or administration in the national or provincial sphere of government exercising functions that involve the management of the environment.

SECTION A:INTRODUCTION

Strategic Environmental Focus (Pty) Ltd (SEF) has been appointed by Dube TradePort Corporation (Project Applicant) to conduct the Scoping and Environmental Impact Reporting (S&EIR) process for the proposed construction of Dube TradePort TradeZone 2 on the remainder of Portion 9 of La Mercy Airport No. 15124 near La Mercy within the eThekwini Municipality KwaZulu-Natal.

A-1 DESCRIPTION OF PROPOSED ACTIVITY

A-1.1 Locality

The site occurs approximately 40km north of the Durban CBD within the eThekwini Municipality. The site is strategically located between the town of Tongaat and the King Shaka Airport, with direct access to the existing national road and R102. The GPS points of the centre of the site are approximately 29°35'34.84" south and 31°07'31.91" east. Refer to the locality map in Figure 1 and Appendix 1. In addition, refer to the Regional Map, land cover map and vegetation types of the study area in Appendix 1.

The site is presently used for sugar cane cultivation.

The eastern boundary of the site is the KSIA and associated TradeZone 1 infrastructure. Existing commercial sugarcane plantations occur on the western and southern boundaries. The northern boundary is the 'conservation areas' set aside for the KSIA/DTP (Phase 1) development (*as illustrated on the Locality Map*). The new Spine Road (*Link Road*) from Ushukela Highway through the site is presently under construction. This road will serve as an access road to the entire Trade Zone development including Phase 1 development.

A-1.2 Surrounding Land Use

To further place the site in context, the land uses within all four major compass directions that surround the site are described in the Table 3 below.

Table 3: Surrounding Land Use Table

Direction	Land Use	Distance (m)
North	'Conservation Area' set aside for the KSIA/DTP (Phase 1) development	Adjacent to the site
	P426 road network	0.5km
South	Agricultural cane lands	Adjacent to the site
	King Shaka International Airport	Adjacent to the site
	Mount Moreland	3.5km
East	King Shaka International Airport	Adjacent to the site
	N2 road network	0.6km
West	Agricultural cane lands	Adjacent to the site
	R102 road network	2km

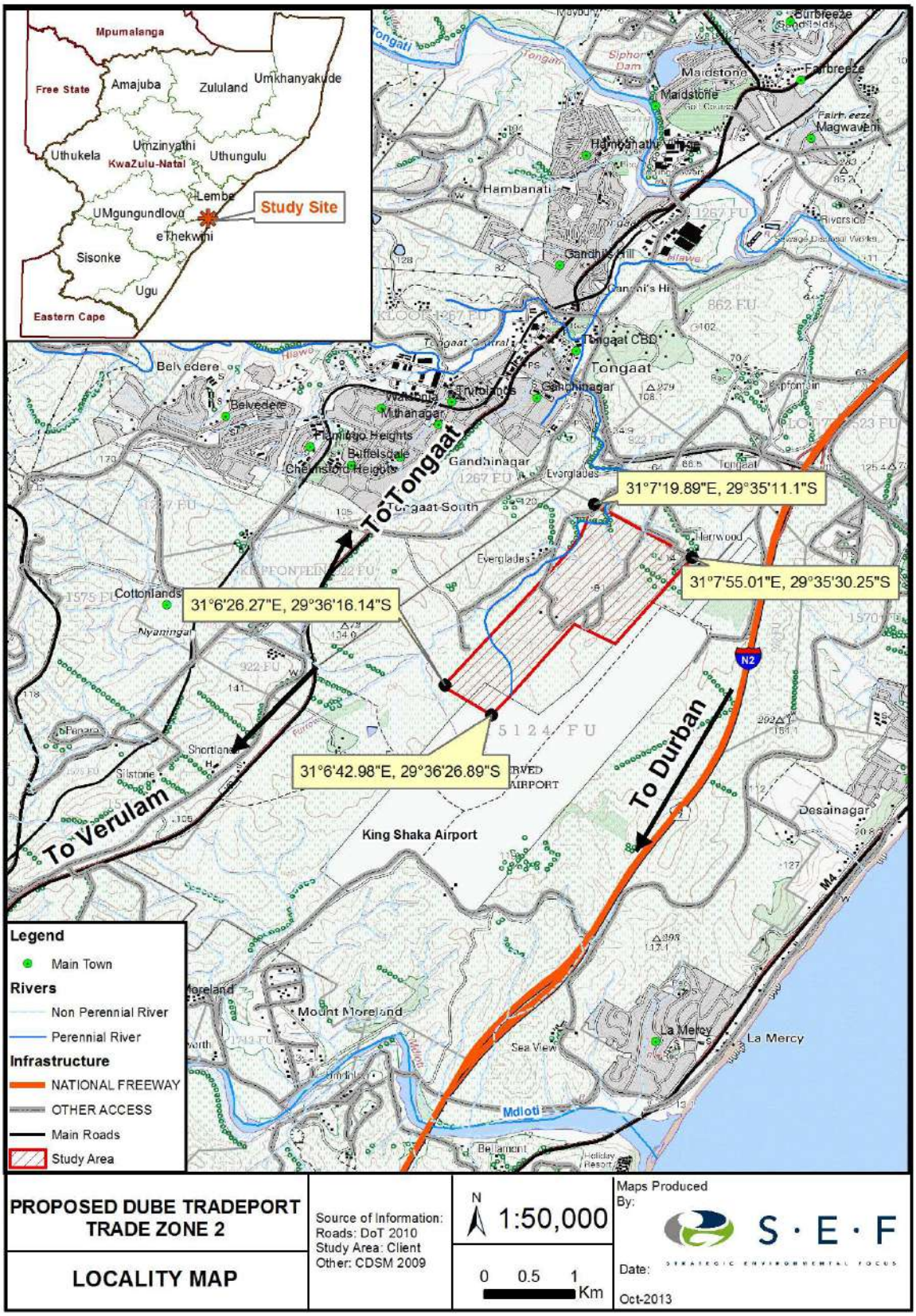

Figure 1: Locality Map of the site

A-1.3 Details of the Project

A-1.3.1 Proposed Dube TradePort TradeZone 2

The KSIA and DTP (collectively termed the 'Airport') opened in May 2010. It has been described as far more than a new airport but rather as a stimulator and generator of economic growth for the province and is, therefore, one of the Province's major priorities. The DTP development has been designed as a world class facility of diverse integrated activities that will attract a wide range of aviation-related businesses and investors, operators, users and tenants. The proposed site for this proposed development is approximately 160ha. As part of the Phase 1 development, a portion of the site has been developed for the Trade Zone, Support Zone, AgriZone and the KSIA (including a Cargo Terminal and Valuable Cargo Building) which was opened in May 2010 and March 2012, respectively. The existing facility (KSIA and Cargo Terminal) has the capacity for 7.5 million passengers per annum and the capacity to handle 100 000 tons of cargo per annum with the capacity to expand to 2 million tons per annum. The DTP Corporation intends to utilise the remainder of Portion 9 for the purposes of aviation-related business activities (such as repairs and maintenance to aircrafts) are proposed at the site and light industrial development to be known as TradeZone 2. This would entail creating platforms, servicing the area and releasing it to the market for development.

The following land uses are proposed for the Proposed TradeZone 2 (refer to the Site Development Plan in Appendix 3):

- Airforce residential areas;
- Proposed cadastral (*proposed light industrial land uses*);
- Airside / cargo terminal; and
- General Aviation area.

The 'conservation area' illustrated on the northern portion of the site is the 'offset area' for the KSIA/DTP Phase 1 development. As part of this application, no development is proposed to take place within the 'conservation area'.

Access to the DTP Trade Zone 2 development will be from the Main Spine Road that links Watson Highway/Ushukela Highway to the Airport. The internal roads through the development site will have a road reserve ranging from 15m to 45m.

In the long-term, the TIA report recommends that a Brake Drive (linking the proposed TradeZone 2 development into R102) must be constructed to provide access into the DTP Trade Zone 2 Development for the generated traffic volumes. In addition, the new link road will be required to link Brake Drive and the Main Spine Road (*currently under construction*) through the DTP development. The proposed access road from Brake Drive will be subject to a separate Environmental Process.

Aviation fuel will stored in tanks to be located within bunded areas of the proposed General Aviation area.

A telecommunication mast is proposed. The design and type of telecommunication mast proposed for the Trade Zone 2 will be finalized once the project layout has been finalized.

Advertising billboards will be erected at the light industrial land use area. The detail design of the billboards will be available during final design.

TradeZone 2 is Zoned Undetermined as per the eThekwini North Planning Scheme. On receipt of the EA, a rezoning application to General Industry will be undertaken.

The controls as per Undetermined Zone are as follows:

Floor Area Ratio (FAR):0.5
Percentage Coverage: 30%
Minimum Lot Size: 2 000m^2
Building Line: 7.5m
S/SPACE: 5.0m

Controls as per General Industry Zone:
FAR: 1.0
Percentage Coverage: 70%
Minimum Lot Size: 1 800 m^2
Building Line: 7.5m
S/SPACE: 2.0m

As per the proposed layout, the development will result to significant infilling of the wetlands that occur within the study area. To mitigate this impact, the proponent intends to rehabilitate wetlands at a candidate offsite site within the similar Tongaat Catchment. A candidate site has been identified that occurs north of the study area, within the same catchment as the study site i.e. Tongati River Catchment. In total, the wetlands within the study site represent 30.0 hectare equivalents of functional wetland area. To ensure a no-net-loss of wetland functional area from the local landscape, a gain of 30 ha-eq of wetland ecological integrity needs to be obtained through the successful rehabilitation of the candidate wetlands. Through successful wetland rehabilitation, the ecological integrity of the wetlands of the candidate site will be improved. This could potentially yield a gain of 49.4ha-eq. In addition, the applicant has already initiated a Water Use Licence application as a result of the proposed encroachment into the natural watercourses and wetlands.

A-1.3.2 Proposed Bulk Services

Delta Built Environment Consultants were appointed by DTPC to compile the Engineering Services Report for Civil and Electrical Infrastructure (refer to this report in Appendix 6).

a) Electricity Supply

(i) Status Quo

The electrical supply in the development area falls under the authority of eThekwini Electricity. A 132kV spur transmission line feeds the northern section of eThekwini from the Ottawa Major through La Mercy Major and terminates at the Tongaat Major. Both La Mercy and Tongaat are equipped with 132/11kV step down transformers and an 11kV distribution platform for the two areas.

The two majors servicing the area were commissioned recently and are currently not at full capacity. The existing 132kV overhead transmission line linking the new Tongaat Major Substation to the La Mercy Major Substation is routed just to the north of Trade Zone 2 development. There is a registered servitude for this overhead powerline. The King Shaka / DTP development is currently supplied by an 11kV distribution line from the La Mercy Major. The existing capacity of the Trade Zone substation is 5MVA, which is adjacent to the new Trade Zone 2 development. This capacity has already been allocated to the Trade House, Trade Zone 1 and Cargo facilities and cannot support the demand of the Trade Zone 2 development.

At present, electricity is distributed via underground cables running along the servitudes adjacent to the internal roads of the development.

(ii) External Bulk Electricity Supply

The design and installation of the bulk electricity supply will be done by eThekwini Electricity.
The calculated total demand is estimated as per the table below:

Table 4: Stand estimates

Area	Size	Factor	Total
Industrial stands	572 583 m^2	80 VA/m^2	46 MVA
Aircraft stands	776 112 m^2	10 VA/m^2	8 MVA

When a diversity of 70% is applied to the industrial stands, the estimated demand is 43MVA.
The following is anticipated regarding reticulation:

- 11kV supplies will be taken from the 132/11kV major substations and distributed along the main access roads to the Trade Zone 2 development. They will feed a series of distribution substations.
- Distribution substations will be planned and positioned in key locations throughout the development.
- 11kV cable routes will be planned to run in the road reserves adjacent or in close proximity to each proposed site, allowing sales and transfers of sites to take place.
- Sites that require more than a 1MVA supply will be serviced by a substation (brickwork structure).
- Smaller sites will either be equipped with their own mini-sub or supplied by a 400V feed from a shared substation (brickwork structure).

(iii) Internal Electrical Reticulation and Supply

- Internal reticulation will be performed by eThekwini Electricity. They will provide a metered supply at the boundary of each serviced stand.
- Street lighting as well as public open space lighting will be designed according to SANS 10098.

b) Telecommunication and Data Services

(i) Status Quo

DTP currently manage all telecommunication data services in the adjacent area. A data centre currently exists at the Trade Zone Cyber port.

(ii) Design Criteria

The current existing DTPC design principles and data network distribution criteria to all sites within the Dube Trade Port Aerotropolis will apply.

(iii) Telecommunication and Data Networks and Infrastructure

- Sleeves will be installed alongside the internal roads, connecting the cyber port to all serviced stands.
- Sleeves will be terminated in a manhole at the boundary of each stand.
- A minimum of 4 x 110mm sleeves will be installed with draw boxes at anticipated tie-ins and road crossings. Draw boxes will not be installed more than 200m apart.
- 3 x 40mm cable tubes will be installed in two of the four sleeves.

c) Water Supply

(i) External Bulk Water Supply

Water supply to the site will flow by gravity from the Inyaninga Reservoir via the existing bulk water network. The following upgrades to the existing bulk water supply infrastructure are proposed:

- The water storage required for the existing and proposed developments that feeds off the Inyaninga Reservoir is estimated to be 6.74 Mℓ, thus a 1 Mℓ reservoir may need to be constructed alongside the existing reservoir to make up for the shortfall in the storage available.
- In order to cater for fire flows to Trade Zone 2, it is proposed that 575m of the existing supply line leading up to the tie-in point for the new internal reticulation system be upgraded from a 200 mm Class 12 uPVC pipe to a 315 mm Class 12 uPVC pipe.

(ii) Internal Water Supply and Reticulation

The design of the water reticulation network will be conducted according to the design guidelines set out in the Red Book. Water to each erven will be individually metered. The proposed development falls in the Class B (moderate-risk area) fire-risk category as described in the Red Book, thus the reticulation system will be designed to accommodate the expected fire flows. Any additional requirements for individual erven over and above Red Book standards will have to be provided by the developer of the individual erven (e.g. booster connections, on site tanks, etc.)

The following parameters have been used in the calculation of the demands from each of the development stands:

- Development classification: Light Industrial
- Water consumption: 0.4kL/100m²
- Floor space ratio of development: 0.5
- Peak factor: 2.4

Internal reticulation water pipelines ranging from 110mm in diameter to 315mm in diameter will be constructed through the development site. Water to each erf within the development site will be individually metered.

d) Solid Waste

(i) Status Quo

Waste sorting facilities currently operating on site at the following locations:

- First line sorting at the 29˚Degrees South in the support zone
- Agrizone
- Cargo
- Trade House
- ACSA's own sorting facility next to the Trade Zone only accessible from airside.

The development falls within the jurisdiction of eThekwini Municipality, and therefore Durban Solid Waste (DSW) will be responsible for provision of waste collection.

(ii) Waste Management and Disposal

The comprehensive solid waste management plan will include, but not be limited to the following:

- Contribution areas within the development.
- Type of waste generation for the contribution areas.
- Basic estimation of waste streams identified and waste volumes will be determined.
- Potential recyclable waste streams will be highlighted.
- Based on this information, a recommendation will be given if the site should have a waste sorting facility or only a temporary waste storage area.

(iii) Design Criteria

Based on the recommendation whether a waste sorting facility or temporary waste storage area will be needed, a design will be submitted to accommodate the type of waste area needed for the site.
According to the Red Book guidelines, occupancy for buildings is one person per 50m².

Due to the uncertainty of the type of tenant, it is important to note that the following table provides a very conservative waste estimate. Each industry has its own waste profile and it would be different for warehouse, offices, industrial areas, etc.

Table 5: Total waste estimate per day

AREA	STAND SIZE (m^2)	ESTIMATED BUIDLING SIZE (m^2)	ESTIMATED NO. OF PEOPLE	AVERAGE WASTE PER DAY
Total	391233	195616.5	3912.33	8798

e) Sewage Treatment

The design of the sewer reticulation system for the proposed Trade Zone 2 development, Trade Zone 1 cargo area, the four BAQ (Business Aviation Quadrants) areas, and the MRO facility will be that of a full waterborne sewerage reticulation system, and will be designed according to the following legislation, polices and requirements:

- National Environmental Management Act. No 107 of 1998;
- eThekwini Municipality Guidelines for the design of foul-water sewers, Part 1 1985;
- Guidelines for Human Settlement and Planning, Part 10: Sanitation;
- South African bureau of standards, Standardised specifications for civil engineering construction, LD Sewers (SANS 1200 LD – Sewers); and
- Policies and Practices of the eThekwini Municipality Water and Sanitation Unit.

(i) Internal Sewer demands

The internal sewer drainage network which will service the proposed development stands have been designed as a self-cleansing gravity sewer system which will drain all the stands and transport all sewerage outflow into the bulk sewer drainage system.

The following parameters have been used in the calculation of the demands from each of the development stands:

- Development classification: Light Industrial
- Daily flow demand: 20 000 ℓ/ha
- Floor space ratio of development: 1.00
- Peak flow: 2

The total demand for the Trade Zone 2 development (including the MRO Facility) is approximately 31.10 ℓ/s.

(ii) Internal sewer pipe sizing

Based on the demands calculated for each stand in the development area, the stipulated minimum slope and the pipe type, an appropriate pipe size for the transportation of sewerage from the various areas into the bulk sewer system has been calculated. The pipe sizes calculated to service the internal reticulation of the proposed development area range from 110mm to 160mm.

The internal sewer reticulation layouts have been developed for the proposed development areas and are provided in Appendix 6, refer to the Drawing Nos. P13092-CC-01-SR-002 and P13092-CC-01-SR-001.

(iii) Bulk Sewerage Drainage – Outfall Sewer

The Northern Waste Water Treatment Works was constructed as a temporary bulk infrastructure and is now reaching its maximum functional capacity. The new bulk sewer pipeline system which will drain the entire existing KSIA area and also the proposed development areas of the TradeZone 2 development, and the MRO facility is currently subject to a decision by the DEA.

The flow calculated to be currently discharging into the Northern treatment works has been investigated to be that of 48.17 ℓ/s. The total sewerage flow from the proposed development, which will thus have to be accommodated in the bulk external sewer pipeline to the Tongaat Waste Water Treatment Works, will be that of the existing flows plus the proposed developmental flows, which amounts to a total flow of 79.27 ℓ/s. With a flow of 79.27 ℓ/s, a pipe size of 315mm has been calculated to be required to drain the KSIA and the proposed development area. It is known that this bulk sewer pipeline will not only serve the KSIA area, but also communities and various other areas along the course of the line. One significant area which this bulk sewer pipeline will have to serve is that of the AgriZone area.

The various areas that are required to drain into the bulk sewer line were identified, and the demands from these areas were calculated. A bulk sewer pipeline size of 500mm diameter, which enlarges to a 600mm wide pipe was calculated to transport the sewerage flows to the Tongaat Waste Water Treatment Works. These demands and pipe sizing will be retained in the revised bulk sewer pipeline to the Tongaat Waste Water Treatment Works.

A pipe size of 250mm has been previously calculated to provide a gravity pipeline from the AgriZone development, which was proposed to connect to the Hlawe River bulk sewer line. The use of gravity pipeline from the Agrizone development has been questioned due to environmental considerations, but from an engineering point of view, this would serve as the optimum solution as in general best practice, gravity sewer systems are preferred.

A scenario where the sewerage flows from the AgriZone development and is pumped to connect to the bulk sewerage line, is seen from an environmental point of view as a preferred option due to the shorter lengths in pipeline, which also decreases the interaction which this pipeline has with the Hlawe River. As such, two bulk sewerage configurations / options, have been considered for this TradeZone 2 development, as described in the project summary.

f) Stormwater Management

Delta Built Environment Consultants were appointed by DTPC to compile the Stormwater Management Plan Report for the proposed Trade Zone 2 Development (refer to this report in Appendix 6).

(i) Background

A Stormwater Management Plan for the DTP Trade Zone 2 development site was compiled by Delta Built Environment Consultants (refer to Appendix 6). The Stormwater Management Plan for the Trade Zone 2 Development builds on the Stormwater Management Plan that was undertaken by Ilembe Engineering Joint Venture Consortium in 2009. The purpose of the study conducted, was to establish the likely impacts that the proposed development would have on the environment, through the development and analysis of stormwater runoff models, and to illustrate the mitigating measures implemented during the project. Consideration of the airport development in its 'ultimate' phase was taken into account as part of that study, which includes the proposed Trade Zone 2 development which is subject of this report.

According to the Civil Infrastructure Report: Bulk Infrastructure Stormwater and Northern Attenuation Dam (NAD) Condition Assessment and Design Report conducted by Ilembe Engineering Joint Venture Consortium The surrounding site of the KSIA is described to have an East to West watershed which divides the site into two main drainage catchments. The Northern catchment, which drains to the Hlawe River via the 'Northern' and 'Western' outfalls, through an existing attenuation structure and into the Tongati River, and the Southern catchment which drains into the Umdloti River through the Mt Moreland 1 and 2 catchments. The proposed Trade Zone 2 development is located in the Northern catchment area and thus, the principles and recommendations from the Stormwater Management Plan Report and the various other reports will be referred to.

The Northern catchment drains into the Hlawe River via the "Northern" and "Western" outfalls, through an existing attenuation structure. The existing attenuation structure, referred to as the Northern Attenuation Dam (NAD) is located on a tributary of the Hlawe River in the KwaZulu-Natal Province, approximately 1.4km south-east of Tongaat, due north of the KSIA.

The NAD was completed in 1976, with design and construction supervision by Brunette Kruger Stoffberg and Hugo Consulting Civil Engineers. The NAD was originally intended to attenuate the increased storm flows off the airport platform (1975 design), and its location has the effect of attenuating the flow from the entire upstream Hlawe river catchment, approximately 1395 Ha in extent. From the assessment and calculations conducted in the above-mentioned reports, it was stated that "*the hydrological study illustrated that the proposed KSIA development has resulted in a minimal increase in the flows into the Northern Attenuation Dam, and that the impact is relatively small in comparison to the original design levels to warrant major modification of the dam*."

The above study warranted the use of the following intervention measures at local points on the KSIA development in order to comply the above stated of the relatively small impact:

- Maintaining adequate ground cover at all places and at all times to negate the erosive forces of stormwater runoff.
- Containing potential soil erosion from construction footprints by constructing protection works to trap sediment at appropriate locations (cut-off trenches, earth berms, silt fences, sediment traps within attenuation structures).
- Re-establishing adequate ground cover immediately upon completion of construction.
- Stabilising watercourse inverts with revetment works.
- Reducing storm flow rates through the use of attenuation structures.
- Preventing pollution by suspended and dissolved solids in storm flows.
- Avoiding situations where natural or artificial slopes may become saturated and unstable.

The principles, standards and philosophies as described in the reports above have been adhered to and incorporated into the design of the Trade Zone 2 Development Stormwater Management Plan.

The principles of the Stormwater Management Plan is to comply with the following:

- Compliance with the eThekwini Municipality stormwater management policy;
- Compliance with the National Water Act (Act No. 36, 1998);
- Compliance with the Department of Environmental Affairs and Tourism (DEAT) specifications; and
- Current international best management practices.

The general level of management required, is that of controlling all runoff emanating from such a site in excess of that which have occurred if the site was in its natural or original state. Stormwater management measures that ensures that the rate of runoff is reduced to pre-development state and that runoff is not concentrated onto adjacent neighbouring sites or other infrastructure, be it road drainage or valley lines, streams, residential etc. must be implemented.

The eThekwini Municipality stormwater management policy requires that the post-development stormwater runoff state does not exceed the pre-development run-off state.

(ii) Development Catchment Areas

In order to assess the pre- and post- catchment area run-off scenarios, the stormwater catchment areas of the proposed development are required. Stormwater catchment areas have been identified for the Trade Zone 2 development as presented on Drawing P13092-CC- 01-SW-01 (Catchment areas layout) in Appendix 6:

(iii) Pre-Development Catchment Area Characteristics

The pre-development catchment area characteristics of the proposed TradeZone 2 development are taken as the state in which the catchment area is undisturbed or in its natural state.

The catchment area can be described to have the following physical characteristics to which we can describe the site:

Surface slope (Cs)

- Lakes and pans – 30%
- Hilly Areas – 70%

Permeability (Cp)

- Permeable – 50%
- Semi-permeable – 50%

Vegetation (Cv)

- Thick bush and plantations – 50%
- Light bush and cultivated areas – 50%

(iv) Post-Development Catchment Area Characteristics

The post-development catchment area characteristics of the proposed Trade Zone 2 development are taken as the state in which the catchment area is after it has been completely developed.

The catchment area can be described to have the following physical characteristics to which we can describe the site:

- Lawns and lakes – 10%
- Industrial areas – 70%
- Streets – 20%

With these above-mentioned catchment area characteristics identified, the runoff for the pre- and post-development scenarios were calculated.

(v) Attenuation Sites

In modelling the impact of the hardened surfaces proposed as part of the development, all the catchments within the development area are predicted to experience an increase in the peak flows and volumes for the 1:10 year and 1:50 year as presented in Table 3-1 and Table 3-2 of the Stormwater Management Plan Report in Appendix 6, and would therefore require some form of mitigation measures. The increase due to the development is fairly high. It is therefore important that the increased runoff is addressed close to the original source (where practically possible).

The potential flood impacts within the development must be taken into account in the layout design, and the peaks can be attenuated to pre-development condition, minimising the erosion and silt deposition downstream of the development. The mitigation measures (during and after construction) would primarily consist of decreasing erosion/silt potential by attenuating the increased run-off generated from the additional hard surface areas.

The recommended option under the current conditions would be to attenuate the peak flows on site, prior to discharging back into the drainage lines. These areas are indicated on the Stormwater Management Plan, but the final hydrographs and positions will be routed to reduce the 1:10 year and the 1:50 year post-development peaks to the pre-development peaks. At this stage, only the total volumes that need to be attenuated and an approximate position where the proposed attenuation could be created, are provided, as this would depend on

the configuration of the final detailed layout and design of the internal reticulation.

The proposed attenuation sites which have been identified based on the current information are presented on Drawing P13092-CC- 01-SW-03 (Proposed attenuation sites layout) in Appendix 6:

The following stormwater infrastructure is proposed:

Table 6: Proposed Stormwater Infrastructure

Water Infrastructure	Description	Location	Volumes
Proposed attenuation pond 1	Serves as the retention facility for stormwater generated from Catchment areas 1, 2 and stormwater from Trade Zone 1.	Y: -10823.75 X: 3275573.31	83 Mℓ
Proposed attenuation pond 2	Serves as the retention facility for stormwater generated from Catchment areas 3, and 4.	Y: -11528.83 X: 3274770.78	58 Mℓ
Existing Watson Highway Culvert	Stormwater from catchment area 5 and the MRO will be channelled into this culvert.	Y: -12131.60 X: 3274964.10	N/A
Proposed River Crossing	This river crossing will facilitate the new Spine Road (Link Road) which will traverse the Hlawe River.	Y: -11608.43 X: 3274520.85	N/A

The proposed attenuation ponds will be sized using the pre- and post-development method, according to the Drainage Manual methodology, and furthermore, they have been sized to retain water for flood events which are in excess of the predevelopment run-off, using the 1:50 year flood run-off volumes. The attenuation ponds are described below:

- Attenuation Pond 1 is situated south-west of the proposed development inside the tributary stream. This pond will attenuate stormwater from Catchment Area 1 and 2 as well as stormwater from TradeZone 1. The pond has been sized to have a capacity of 83 ML.
- Attenuation Pond 2 is situated north-west of the proposed development and will attenuate stormwater from Catchment Areas 3 and 4 as well as the MRO. The pond has been sized to have a capacity of 58 ML.

The Water Use License Application for the proposed attenuation structures are currently underway and will be submitted to DWA.

(vi) Stormwater Management for Trade Zone 2

The Stormwater Management Plan has been undertaken taking into consideration the Stormwater Management Plan conducted for the greater King Shaka International Airport by the Ilembe Engineering joint venture consortium. The stormwater management philosophy of the Illembe study should thus line up with the philosophy of the proposed Trade Zone 2 stormwater management philosophy. With that being said the stormwater philosophy which will be used for the Trade Zone 2 development, in line with the King Shaka

International Airport Stormwater Management Plan is as described in the subsequent sections.

(vii)Stormwater Management Measures

In order to mitigate the detrimental effects and the consequent potential for damage as a result of development at the site, the application of appropriate stormwater management techniques, thereby reducing the post-development flows at points of discharge, to flows comparative to pre-development are required. The natural equilibrium that exists within the downstream riverine environment should thus remain undisturbed. Such measures include, *inter alia*, the following:

- Maintaining adequate ground cover at all places and at all times to negate the erosive forces of stormwater runoff.
- Containing potential soil erosion from construction footprints by constructing protection works to trap sediment at appropriate locations (cut-off trenches, earth berms, silt fences, sediment traps within attenuation structures).
- Re-establishing adequate ground cover immediately upon completion of construction.
- Stabilising watercourse inverts with revetment works.
- Reducing storm flow rates through the use of attenuation structures.
- Preventing pollution by suspended and dissolved solids in storm flows.
- Avoiding situations where natural or artificial slopes may become saturated and unstable.

For the Trade Zone 2 development, two attenuation structures will be required to accommodate the increase in stormwater for the proposed development area.

It should be kept in mind that even though the attenuation structures as described above are required for the Trade Zone 2 development, they are actually temporary structures until the time where the King Shaka International Airport is developed to its ultimate state. The attenuation structures as described above will thus be amalgamated into the final development Stormwater Management Plan.

(viii) Stormwater runoff control

Formal surface and underground stormwater systems will be provided in the overall development for the acceptance of stormwater drainage, but it is important that the peak runoff rate does not exceed the hydraulic capacities of the elements in the major stormwater system. The following are general guidelines which will be followed for stormwater.

- **Buildings**

Any building will inevitably result in some degree of flow concentration, or deflection of flow around the building. The developer/owner shall ensure that the flow path of the stormwater is adequately protected against erosion and is sufficiently roughened to retard stormwater flow to the same degree, or more, as that found in the natural pre-development state of the site.

- **Roof Drainage**

Building designs must ensure that rainfall runoff from roofing and other areas, not subjected to excessive pollution, must be efficiently captured for re-use where possible for on-site irrigation and non-potable water uses.

- **Parking Areas and Yards**

Any external parking area, yard or other paved area will be designed to attenuate stormwater runoff from a major storm to an acceptable degree. Any area described above will discharge rainwater flowing over, or falling onto its surface, in a controlled manner either overland, or into an attenuation facility.

- **Roads**

Roads will be designed and graded to avoid concentration of flow along and off the road. Inlet structures at

culverts will be designed to ensure that the capacity of the culvert does not exceed the pre-development stormwater flow at that point and attenuation storage should be provided on the road and/or upstream of the stormwater culvert. Outlet structures at a road culvert or a natural watercourse will be designed to dissipate flow energy.

- **Stormwater Storage Facilities**

Attenuation ponds shall be integrated with the landscape on the site and will be designed to facilitate stormwater for 1 in 50 year return period. They will be unlined.

- **Channels**

Lined and unlined channels may be constructed to convey stormwater to a natural watercourse where deemed necessary and unavoidable. Channels must be constructed with rough artificial surfaces, or lined with suitable, robust vegetation, to be non-erodible and to provide maximum possible energy dissipation to the flow.

- **Energy Dissipaters**

Measures will be taken to dissipate flow energy wherever concentrated stormwater flow is discharged down an embankment or erodible slope and the resulting supercritical flow poses a significant risk to the stability of the waterway.

(ix) Internal Stormwater Drainage

The stormwater control philosophy will be to restrict post-development flows into the HIawe River. In order to achieve this, it is intended to provide a 'sustainable drainage system' in line with international best practice. This will be achieved by a combination of on-site attenuation tanks for roof run-off, permeable paving to parking areas, and unpaved areas, etc. Excess stormwater run-off will be accommodated in the roadway drainage, which will drain into the bulk stormwater system. The stormwater system consists of combined surface, road and pipe systems. In order to determine surface water run-off, probabilistic relationships between the average daily rainfall, rainfall intensity, duration and return period are required.

(x) Conclusion

One of the negative impacts of the development is a substantial increase in the peak stormwater runoff flows for both the 1 in 10 and 1 in 50 year return periods. The increase in peak runoff will primarily be mitigated by the proposed attenuation ponds. However, the introduction of supplementary Sustainable Urban Drainage Systems (SuDS) technologies during the detailed design phase will further reduce the runoff flows. The unification of SuDS technologies and attenuation ponds is expected to reduce the post-development peak runoffs for the 1 in 10 and 1 in 50 year storms to pre-development levels.

g) Proposed Access Road and road upgrades

A Traffic Impact Assessment (TIA) was conducted by Aurecon (Pty) Ltd for the proposed DTP TradeZone 2 Project. Refer to the TIA in Appendix 6. To accommodate the anticipated traffic calculated by the study the following is proposed:

- The link capacity of the R102 and uShukela Drive must be increased by providing dual lanes per direction on each link. This should be implemented by eThekwini Transport Authority (ETA)/KZN Department of Transport (KZN DOT) within 5 years as the existing traffic condition is not favourable.
- The existing uShukela Drive / Tongaat off-ramp eastern intersection should be converted into a traffic signal controlled intersection in order to reduce delays experienced by the right turning traffic from uShukela Drive west approach towards Durban, and it is recommended that a protected signal phase be provided.
- The existing uShukela Drive / Tongaat off-ramp western intersection should be converted into a traffic signal controlled intersection in order to reduce delays experienced by the right turning traffic from off-ramp approach towards Westbrook. It is further recommended that a left slip lane towards Tongaat

should be provided.

- The new proposed uShukela Link road intersection on uShukela Drive should be signalised. Exclusive turning lanes should be provided as recommended in Chapter 11 of the TIA.
- The existing intersection of uShukela Drive and R102 should be upgraded as per Chapter 11 of the TIA.
- The proposed Brake Drive Link road (*to be subject to a separate Environmental Application*) must be provided to intersect with the main uShukela Access Link Road. It is further recommended that the intersection of R102 and Brake Drive should be upgraded in order to accommodate the expected development traffic. Refer to Chapter 11 of the TIA for thorough details.
- The TIA should be submitted to the eThekwini Municipality/Ethekwini Transport Authority (ETA), KZN DoT and SANRAL for approval.

A-1.3.3 Details of the Construction Phase

Subject to receiving Environmental Authorisation (EA) from DEA, the construction of the TradeZone 2 development will commence in Mid 2015. The construction period is estimated to be 5 years from inception to completion.

The appointed Contractor will be responsible to prepare a Construction Site Development Plan prior to establishing on site. This plan will indicate the boundaries of the site that encompasses all construction related activities, vehicle and pedestrian access points, laydown area/s, offices, stockpile areas, storage areas, ablution facilities, etc. This Site Development Plan must be approved by the appointed Environmental Control Officer (ECO) as provided for within the Environmental Management Programme (EMPr) (refer to Appendix 7).

The construction programme will reflect the separate work sections, in chronological order, according to the Contractor's intended production sequence, as described on the Construction Site Layout Plan.

Water sourced from the eThekwini Municipality and rainwater harvested from the Trade Zone 1 development will be used during the construction phase. This water will be used for various activities on site, including dust suppression on dry, windy days.

Diesel generators will be utilised on site and stored within the storage area as far away from the wetland/ watercourse boundary as possible (as indicated on the Construction Site Development Plan).

The Contractor will be responsible for the management and removal of all solid waste from site during the construction phase) to a designated landfill site. A method statement for the management of waste must be drafted and signed off by the ECO prior to commencement of construction activities, as per the attached EMPr (Appendix 7).

A-1.3.4 General Earthworks

All earthworks should be carried out in a manner to promote stable development of the site. It is recommended that earthworks be carried out along the guidelines given in SANS 1200 (current version).

Where natural ground slopes are steeper than 1 vertical to 6 horizontal (6 degrees), the fill must be benched into the slope. Benches should be 0.5m deep and 2.0m wide.

Placement of fill layers should be undertaken in layers not exceeding 200mm thick when placed loose and compacted using suitable compaction plant to achieve 93% Modified AASHTO maximum dry density.

The clayey sub-soils will be impassable to construction traffic during and after periods of rainfall (when wet).

This material is moisture sensitive and will heave when wet under compactive effort, in which case it would need to be undercut and spoiled, as it may be uneconomical to wait for the material to dry. Furthermore, these clays will soften significantly when saturated, which could lead to excessive settlement of any supporting structure or paving.

Terraces should be graded to direct water away from the fill edges, and small earth bunds should be constructed along the crests of fills, to prevent overtopping and erosion of fill embankment slopes. These bunds should be a minimum 450mm wide and 300mm high.

Density control of placed fill material should be undertaken at regular intervals during fill construction.

Boulders larger than 200mm diameter or 1/3 of the layer thickness when loose should be removed from the fill material as these could complicate the compaction works, and also cause piping within fills. Furthermore, large boulders in fills could cause later problems during construction of foundations.

Cut and fill slopes soils should be formed to batters of 1 vertical to 2 horizontal and to a height not greater than 2 metres where retaining walls are not provided. Engineered fill slopes should be over-constructed and thereafter trimmed back to the required position.

Cuts in highly weathered bedrock should not exceed gradients of 1 vertical in 0.75 horizontal, provided there is no day lighting bedding planes. Where bedding planes daylight out of the cut slope, the slope must be cut back to the exact angle, or flatter than the dip angle of the beds. Experience has shown that variations in dip and direction of dip can occur.

It is therefore recommended that a competent geotechnical engineering professional be appointed to inspect and approve all cut slopes.

Cut and fill heights, greater than 2 metres would need to be inspected and approved by an engineering geologist or geotechnical engineer with all Method Statement approved by the ECO.

A-1.3.5 Foundations

a) Lightly loaded Single- and Double-storey Structures

The soils generally classified as low-expansive clays but in combination with relatively thick horizons of material, may lead to heave due to the cumulative effect of the deeply weathered soil profile. As such, cumulative heave of approximately 15 mm may be anticipated during the seasonal wetting and drying cycle.

Due to the danger of heave, some precautions need to be taken in founding the single-storey structures. The following precautions are recommended:

- All strip footings are lightly reinforced.
- Articulation joints at all internal and external doors, and openings are installed.
- Light reinforcement placed in masonry.
- Site drainage and service/plumbing precautions are taken.
- A 1.0 m wide concrete apron is constructed around the perimeter of the buildings to stabilise ground moisture conditions.

b) Heavily Loaded Multi-Storey Structures

For higher bearing pressures than that stated above, it is recommended that all foundation loads be transferred onto competent weathered bedrock of at least very soft rock strength where a maximum bearing capacity of 250 kN/m^2 is considered applicable.

For higher foundation pressures, structures will need to be supported on a piled foundation. Piles will need to be designed to carry the load predominantly in end bearing with a small component in skin friction.

The site is considered suitable for development, provided the recommendations given in the geotechnical report are followed. Site-specific geotechnical investigations will be required once the layout of the proposed development is known.

A-1.3.6 Cut and Fill Operations

Cut and fill levels will be kept to a minimum in the design of the platform to reduce the influence on the natural topography. The fill banks of Platform 1 to the north-east and Platform 2 will be cut back to follow the contours of the 1 in 100 flood lines, as not to disturb the natural watercourse. The provided slope of the platforms will contribute to the managing and channelling of stormwater flow to a specified attenuation area so as not to disturb the environment.

A-1.3.7 Final Mass Earthworks Platform and Levels

The preliminary first order cut and fill volumes which have been calculated for the construction of all the platforms after the optimisation process, are as follows:

- Total cut of 3 935 977 m^3
- Total cut available for fill of 3 552 421 m^3
- Total fill of 4 290 634 m^3
- Fill available from Watson Highway Link Road contract 511 315 m^3
- Fill shortfall volume 365 549 m^3
- Top soiling volume of 254 820 m^3

The fill shortage material will either be obtained from other excavations on site or imported from a reliable commercial source.

A-2 LEGAL REQUIREMENTS APPLICABLE TO THIS APPLICATION

The application form informing the Department of the intent to obtain an Environmental Authorisation (EA) was submitted to the DEA on 9 May 2012. The project was subsequently registered and DEA issued the project with reference number DEA Ref: 14/12/16/3/3/2/341. Refer to Appendix 4 for the Application for Authorisation Form and the DEA acknowledgement of receipt of the application.

The Final Scoping Report (including the Plan of Study (PoS) for Environmental Impact Report (EIR) was submitted to the DEA on 27 August 2012 and was accepted by the DEA in a letter dated 8 November 2012 (refer to Appendix 4 for the acceptance of the Final Scoping Report and PoS for EIR).

The legislation, guidelines and policies applicable to this project are as follows:

A-2.1 NEMA and the Environmental Impact Assessment Regulations

The EIA Regulations, promulgated under NEMA, focus primarily on creating a framework for co-operative environmental governance. NEMA provides for co-operative environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by State Departments and to provide for matters connected therewith.

In terms of the EIA Regulations of 2010 and activities listed in GN No. 544 and 546 (requiring a Basic Assessment process) and GN No. 545 (requiring a S&EIR process), the following listed activities are deemed by the EAP to be applicable to the proposed Dube Trade Port Trade Zone 2 Project based on the information

provided by the project proponent and their consulting engineers and specialists.
It must be noted that activities requiring a Basic Assessment process, as well as activities requiring a S&EIR process are triggered by the proposed development. Therefore, according to the below listed activities, a situation arises, whereby the legal requirements of the activity listed in terms of GN No. 545 of 2010 supersede those of the activities listed in terms of GN No. 544 and 546 of 2010, and as such **this application has undergone a S&EIR process**.

The listed activities are deemed to include activities that could potentially have a detrimental impact on the social and biophysical state of an area and as such, are required to undergo an environmental impact assessment process.

GN No & Activity Number		Activity Description	Project Description
GN No. 544 of 18 June 2010	9	The construction of facilities or-infrastructure exceeding 1000 metres in length for the bulk transportation of water, sewage or storm water: i. with an internal diameter of 0,36 meters or more; or ii. with a peak throughput of 120 litres per second or more, excluding where: a. such facilities or infrastructure are for bulk transportation of water, sewage or storm water or storm water drainage inside a road reserve; or where such construction will occur within urban areas but further than 32meters from a watercourse, measured from the edge of the watercourse.	The area has been earmarked for aviation-related activities as well as industrial activities. These activities will require water and will generate sewage and stormwater. The internal stormwater, sewerage and water reticulation systems to service the proposed development will be constructed within the water bodies and within 32m of the edge of the water courses.
	11	The construction of: (i) canals; (ii) channels; (iii) bridges; (iv) dams; (v) weirs; (vi) bulk storm water outlet structures; (vii) marinas; (viii) jetties exceeding 50 square metres in size; (ix) slipways exceeding 50 square metres in size; (x) buildings exceeding 50 square metres in size; or (xi) infrastructure or structures covering 50 square metres or more i. where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.	The site has water courses running through it and they will be crossed as a result of the proposed buildings and supporting services infrastructure.
	12	The construction of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic meters or more, unless such storage falls within the ambit of activity 19 of Notice 545 of 2010.	The area has been earmarked for aviation-related activities as well as industrial activities. These activities will require water and it is anticipated that the infrastructure will fall within this listed activity.

	18	The infilling or depositing of any material of more than 5 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock from (i) a watercourse; (ii) the sea; (iii) the seashore; (iv) the littoral active zone, an estuary or a distance of 100 meters inland of the high-water mark of the sea or an estuary, whichever distance is the greater but excluding where such infilling, depositing, dredging, excavation, removal or moving (a) is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority; or (i) occurs behind the development setback line.	There are various water bodies on the site which would require infilling to create various platforms through dredging, excavation, removal or moving of soil, sand, rock and so on.
	39	The expansion of (i) canals; (ii) channels; (iii) bridges; (iv) weirs; (v) bulk storm water outlet structures; and (vi) marinas; within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, where such expansion will result in an increased development footprint but excluding where such expansion occur behind the development setback line.	Bulk stormwater outlet structures will be constructed within a watercourse or within 32m of a watercourse.
	50	The expansion of airports where the development footprint will be increased.	The proposed development will entail aviation-related activity such as the storage, repair and maintenance of aircrafts at the site.

GN No. 546 of 18 June 2010	1	The construction of billboards exceeding 18 square meters in size outside urban or mining areas or outside industrial complexes in KwaZulu Natal: i. A protected area identified in terms of NEMPAA, excluding conservancies; ii. National Protected Area Expansion Strategy Focus areas; iii. World Heritage Sites; iv. Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; v. Sites or areas identified in terms of an International Convention; vi. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; vii. Core areas in biosphere reserves; viii. Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve; ix. Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; In an estuary	The proposed activities will include advertising billboards in and/or near the site.

	3	The construction of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast: (a) is to be placed on a site not previously used for this purpose, and (b) will exceed 15 meters in height, but excluding attachments to existing buildings and masts on rooftops. In KwaZulu-Natal i. In an estuary; ii. Outside urban areas, (aa) A protected area identified in terms of NEMPAA, excluding conservancies; (bb) National Protected Area Expansion Strategy Focus areas; (cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; (dd) Sites or areas identified in terms of an International Convention; (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (ff) Core areas in biosphere reserves; (gg) Areas within 10 kilometers from national parks or world heritage sites or 5 kilometers from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve; iii. Areas seawards of the development setback line or within 1 kilometer from the high-water mark of the sea if no such development setback line is determined. Inside urban areas; (aa) Areas zoned use as public open space; (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose.	The area has been earmarked for aviation-related activities as well as industrial activities. These activities require telecommunication or radio transmission masts which are likely to exceed 15 metres in height. The mast will be located within the General Aviation area of the SDP. The design and type of the mast will be finalized during detail design stage.

GN No. 545 of 18 June 2010	3	The construction of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic meters.	Fuel will be stored on site with a combined capacity of more than 500m^3. This will be comprised or aviation fuel and a limited amount of diesel/petrol for the aviation-related facilities. Fuel storage facilities will be located within bunded areas of the proposed General Aviation area.
	15	**Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more**; except where such physical alteration takes place for: ii. linear development activities; or iii. agriculture or afforestation where activity 16 in this Schedule will apply.	The site for the proposed development is approximately 160ha.

In accordance with the EIA Regulations (2010), an EIR must contain all the information that is necessary for the competent authority to consider the application and to reach a decision and must include those points included in Section 31(2) of Regulation 543 which are laid out in the table below. In order to facilitate review by the competent authority, this report is structured around these requirements.

NEMA Regulation 543, Section 31 Requirements	Relevant Section of the Report
Details of the EAP who compiled the report and the expertise of the EAP to carry out an environmental impact assessment	Page v-vi
A detailed description of the proposed activity	Section A
A description of the property on which the activity is to be undertaken and the location of the activity on the property.	Section A
A description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.	Section B
Details of the public participation process conducted including: (i) Steps undertaken in accordance with the plan of study; (ii) A list of persons, organisations and organs of state that were registered as interested and affected parties; (iii) A summary of comments received from, and a summary of issues raised by registered interested and affected parties, the date of receipt of these comments and the response of the EAP to those comments; and (iv) Copies of any representations and comments received from registered and affected parties.	Section C-4
A description of the need and desirability of the proposed activity	Section A-4
A description of identified potential alternatives to the proposed activity, including advantages and disadvantages that the proposed activity or alternatives may have on the environment and the community that may be affected by the activity.	Section E
An indication of the methodology used in determining the significance of potential environmental impacts.	Section D
A description and comparative assessment of all alternatives identified during the environmental impact process.	Section E
A summary of the findings and recommendations of any specialist report or report on a specialised process.	Section G
A description of all environmental issues that were identified during the environmental impact assessment process, an assessment of the significance of each issue and an indication of the extent to which the issue could be addressed by the adoption of mitigation measures.	Section F
An assessment of each identified potentially significant impact.	Section F
A description of assumptions, uncertainties and gaps in knowledge.	Section D
A reasoned opinion as to whether the activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation.	Section G
An environmental impact statement which contains a summary of the key findings and a comparative assessment of the positive and negative implications.	Section G
A draft environmental management programme	Appendix 7
Copies of any specialist reports and reports on specialist processes.	Appendix 6

A-2.2 National Water Act, 1998 (Act No. 36 of 1998)

The National Water Act, 1998 (Act No. 36 of 1998) (NWA) aims to provide management of the national water resources to achieve sustainable use of water for the benefit of all water users. This requires that the quality of water resources is protected as well as integrated management of water resources with the delegation of powers to institutions at the regional or catchment level. The purpose of the Act is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in responsible ways.

Of specific importance to this application is Section 19 of the NWA, which states that an owner of land, a person in control of land or a person who occupies or uses the land which thereby causes, has caused or is likely to cause pollution of a water resource must take all reasonable measures to prevent any such pollution from occurring, continuing or recurring and must therefore comply with any prescribed waste standard or management practices.

Due to the various streams, wetlands, tributaries and drainage lines that occur on site as well as the construction of the Trade Zone 2 development and construction of stormwater attenuation ponds, according to the NWA, the proposed development may trigger the following water uses listed in Section 21:

(b) storage of water;
(c) impeding or diverting the flow of water in a watercourse;
(d) engaging in stream flow reduction activity;
(g) disposing of waste in a manner which may detrimentally impact on a water resource; and
(i) altering the bed, banks, course or characteristics of a watercourse.

Accordingly, the Water Use Licence application has been lodged with the Department of Water Affairs (DWA) for the proposed DTP Trade Zone 2 development.

A-2.3 National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)

The National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEMWA) aims to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development, to provide for specific waste management measures, to provide for the licensing and control of waste management activities, to provide for compliance and enforcement, to name but a few of the purposes of the Act.

A-2.4 Other Legal Requirements

A-2.4.1 Acts

Constitution of the Republic of South Africa

The Constitution of the Republic of South Africa has major implications for environmental management. The main effects are the protection of environmental and property rights, the change brought about by the sections dealing with administrative law, such as access to information, just administrative action and broadening of the locus standing of litigants. These aspects provide general and overarching support and are of major assistance in the effective implementation of the environmental management principles and structures of the NEMA. Section 24 in the Bill of Rights of the Constitution specifically states that:

Everyone has the right -

- To an environment that is not harmful to their health or well-being; and
- To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that -

- Prevent pollution and ecological degradation;
- Promote conservation; and
- Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)

The purpose of the Biodiversity Act is to provide for the management and conservation of South Africa's biodiversity within the framework of the NEMA and the protection of species and ecosystems that warrant national protection. As part of its implementation strategy, the National Spatial Biodiversity Assessment was developed.

This Act is applicable to this application for environmental authorisation, in the sense that it requires the project applicant to consider the protection and management of local biodiversity.

National Heritage Resources Act, 1999 (Act No. 25 of 1999)

The National Heritage Resources Act legislates the necessity for cultural and heritage impact assessment in areas earmarked for development, which exceed 0.5 ha. The Act makes provision for the potential destruction to existing sites, pending the archaeologist's recommendations through permitting procedures. Permits are administered by the South African Heritage Resources Agency (SAHRA).

KwaZulu-Natal Heritage Act, 2008 (Act No. 4 of 2008)

KwaZulu-Natal Heritage Act provides for the conservation, protection and administration of both the physical and the living or tangible heritage resources of the Province of KwaZulu-Natal; and to establish a statutory Council to administer heritage conservation in the Province. Amafa / Heritage KwaZulu-Natal is the provincial heritage conservation agency for KwaZulu-Natal. Amafa was established as a statutory body in terms of the KZN Heritage Act of 1997, replaced by the KZN Heritage Act of 2008.

National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003)

The purpose of this Act is to provide for the protection, conservation and management of ecologically viable areas representative of South Africa's biological diversity and its natural landscapes.

Subdivision of Agricultural Land Act, 1970 (Act No. 70 of 1970)

The purpose of the Act is to control the subdivision and, in connection therewith, the use of agricultural land.

Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)

To provide for control over the utilization of the natural agricultural resources of the Republic in order to promote the conservation of the soil, the water sources and the vegetation and the combating of weeds and invader plants; and for matters connected therewith.

Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)

To provide for the health and safety of persons at work and for the health and safety of persons in connection with the use of plant and machinery; the protection of persons other than persons at work against hazards to health and safety arising out of or in connection with the activities of persons at work; to establish an advisory council for occupational health and safety; and to provide for matters connected therewith.

National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)

The NEMA: Air Quality Act states the following as its primary objective: "To reform the law regulating air quality in order to protect the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development while promoting justifiable economic and social development; to provide for national forms and standards regulating air quality monitoring, management and control by all spheres of government, for specific air quality measures, and for

matters incidental thereto.

Everyone has a right to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that:

- Prevent pollution and ecological degradation;
- Promote conservation; and
- Secure ecologically sustainable development and use of natural resources.

And whereas minimisation of pollution through vigorous control, cleaner technologies and cleaner production practises is key to ensuring that air quality is improved, and whereas additional legislation is necessary to strengthen the Government's strategies for the protection of the environment, and more specifically, the enhancement of the quality of ambient air, in order to secure an environment that is not harmful the health or well-being of people.

Hazardous Substances Act, 1973 (Act No. 15 of 1973)

The object of the Act is inter alia to 'provide for the control of substances which may cause injury or ill health to or death of human beings by reason for their toxic, corrosive, irritants strongly sensitising or flammable nature or the generation of pressure thereby in certain circumstances, for the control of electronic products, for the division of such substances or products into groups in relation to the degree of danger, for the production and control of such substances.

In terms of the Act, substances are divided into schedules, based on their relative degree of toxicity, and the Act provides for the control of importation, manufacture, sale, use, operation, application, modification, disposal and dumping of substances in each schedule.

Pollution control in South Africa is affected through numerous national statutes, provincial ordinances and local authority by-laws. Only the more significant legislation pertaining to the regulation of water, air, noise and waste pollution is dealt with in this section.

Civil Aviation Act, 2009 (Act No. 13 of 2009)

To repeal, consolidate and amend the aviation laws giving effect to certain International Aviation Conventions; to provide for the control and regulation of aviation within the Republic; to provide for the establishment of a South African Civil Aviation Authority with safety and security oversight functions, to provide for the establishment of an independent Aviation Safety Investigation Board in compliance with Annex 13 of Chicago Convention, to give effect to certain provisions of the Convention on Offences and Certain other Acts Committed on Board Aircraft; to give effect to the Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation; to provide for the National Aviation Security Program; to provide for additional measures directed at more effective control of the safety and security of aircraft, airports and the like; and to provide for matters connected thereto.

Promotion of Access to Information Act, 2000 (Act No. 2 of 2000)

The Act recognises that everyone has a Constitutional right of access to any information held by the state and by another person when that information is required to exercise or protect any rights. The purpose of the Act is to foster a culture of transparency and accountability in public and private bodies and to promote a society in which people have access to information that enables them to exercise and protect their rights.

Planning and Development Act, 2008 (No. 6 of 2008)

To provide for the adoption, replacement and amendment of schemes, to provide for the subdivision and consolidation of land; to provide for the development of land outside schemes; to provide for the phasing or cancellation of approved layout plans for the subdivision or development of land; to provide for the alteration, suspension and deletion of restrictions relating to land; to establish general principles for the permanent

closure of municipal roads or public places; to provide for the adoption and recognition of schemes, to provide for compensation in respect of matters regulated by the Act; to establish the KwaZulu-Natal Planning and Development Appeal Tribunal; to provide for provincial planning and development norms and standards; and to provide for matters connected therewith.

The National Building Regulations and Building Standards Act 103 0f 1997

"To promote the promotion of uniformity in the law relating to the erection of buildings in the areas of jurisdiction of local authorities for the prescribing of building standards and for matters connected therewith".

Sustainable Development

The principle of Sustainable Development has been in the Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996) and given effect by NEMA. Section 1(29) of NEMA states that sustainable development means the integration of social, economic and environmental factors into the planning, implementation and decision-making process so as to ensure that development serves present and future generations. Thus sustainable development requires that:

- The disturbance of ecosystems and loss of biological diversity are avoided, or where they cannot be altogether avoided, are minimised and remedied;
- That pollution and degradation of the environment are avoided, are minimised and remedied;
- The disturbance of landscapes and sites that constitutes the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner;
- A risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions; and
- Negative impacts on the environment and on people's environmental rights be anticipated; and, prevented and where they cannot altogether be prevented, are minimised and remedied.

A-2.4.2 Provincial Policies and/or Guidelines

Integrated Environmental Management (IEM)

IEM is a philosophy for ensuring that environmental considerations are fully integrated into all stages of the development process. This philosophy aims to achieve a desirable balance between conservation and development (DEAT, 1992). The IEM guidelines intend encouraging a pro-active approach to sourcing, collating and presenting information in a manner that can be interpreted at all levels.

The Department of Environmental Affairs (DEA) Integrated Environmental Management Information Series guidelines are also considered during this S&EIR application process.

National Spatial Biodiversity Assessment

The National Spatial Biodiversity Assessment (NSBA) classifies areas as worthy of protection based on its biophysical characteristics, which are ranked according to priority levels.

Protected Species – Provincial Ordinances

Provincial ordinances were developed to protected particular plant species within specific provinces. The protection of these species is enforced through permitting requirements associated with provincial lists of protected species. Permits are administered by the Provincial Departments of Environmental Affairs.

Provincial Growth & Development Strategy (PGDS)

The PGDS identifies the following six provincial priorities as key components in the province's drive to address the developmental challenges emanating from the province's socio-economic profile. The six provincial priorities are:

- Strengthening governance and service delivery;

- Sustainable economic development and job creation;
- Integrating investments in community infrastructure;
- Developing human capability;
- Developing a comprehensive response to HIV/AIDS; and
- Fighting poverty and protecting vulnerable groups in society.

The KZN Government believes that if the province's many comparative and competitive advantages are exploited to the full it will be possible to achieve the sustainably higher and shared economic growth which is necessary to address its many developmental challenges. The KZN Government aims to grow the economy even faster than the national average, so that the province's contribution to Gross Domestic Product (GDP) (16.3% in 2005) increases. The PGDS's economic target for 2014 is 7.5%.

The PGDS acknowledges that the Dube TradePort is a key intervention by the KwaZulu-Natal provincial government to cement its position as the premier transport, logistics and communication hub on the SADC region and the continent. It is expected to act as catalyst for economic development and labour-intensive growth throughout the province.

Provincial Spatial Economic Development Strategy (PSEDS)

The PSEDS is aimed at transforming the structure of the economy and narrowing and eventually eliminating the gap between the first and second economies. The four pillars of the strategy are as follows:

- Increasing investment in the province;
- Skills and capacity building;
- Broadening participation in the economy; and
- Increasing competitiveness.

The PSEDS identifies the sectors of the provincial economy which will drive the growth of the province and address unemployment and poverty as follows:

- Agriculture - including agri-industry (with opportunities to impact considerably on the economic needs of the poor through Land Reform);
- Industry - including heavy and light industry and manufacturing;
- Tourism - including domestic and foreign tourism; and
- Service sector - including financial, social, transport, retail and government.

The logistics and transport sector (including rail) in the services sector are also identified as important subsectors underpinning growth in all four sectors.

The PSEDS also acknowledges that the potential for industrial development in the province is anchored by the nodes of eThekwini and Umhlatuze. The corridors between these two nodes form the primary zone of industrial development in the province.

One of the principles of the PSEDS is that settlements and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or link the main growth centres. The eThekwini – Umhlathuze development corridor has been identified as having the potential for greatly impacting on economic growth and the development of impoverished areas.

A-2.4.3 Local Policies and/or Guidelines

a) eThekwini Municipality Integrated Development Plan (IDP)

eThekwini Municipality's IDP (2009/2010) has identified the following challenges:

- Low economic growth and high rate of unemployment;
- Access to basic household and community services are less than optimal;

- Relatively high levels of poverty;
- Low levels of literacy and skills development;
- Sick and dying population affected by HIV/AIDS;
- Exposure to unacceptably high levels of crime and risk;
- Many development practices still unsustainable; and
- Ineffectiveness and inefficiency of inward-looking local government still prevalent in the Municipality.

In order to achieve the vision of the municipality six key choices have been identified which are used to create a framework around which the IDP can be implemented. These choices are as follows: -

- Improving our port and logistics Infrastructure;
- Using LUMS to increase densities and to reduce urban sprawl;
- Bridging the digital divide;
- Promoting public transport;
- Prioritising Eco-Tourism; and
- Ensuring ecological integrity.

These choices, together with the city's 8 Point Plan, provide the underlying basis upon which the city is to grow and develop.

With regard to economic development the municipality aims to contribute towards the achievement of the key national targets, that is, annual growth rate of 6% between 2010 and 2014, as per the Accelerated and Shared Growth-SA Initiative (ASGISA).

b) Draft Northern Spatial Development Plan (NSDP)

According to the eThekwini Municipality's Draft Northern Spatial Development Plan (NSDP), dated June 2009, Tongaat and KSIA/Dube Trade Port Logistics Hub are located within the Northern Development Corridor, and new development opportunities associated with the hub must be integrated with existing urban development. The proposed development has taken into consideration the Draft NSDP.

The following information has been extracted from the Draft NSDP, which was available for comment until 20 October 2009:

Dube Trade Port (King Shaka International Airport)

The establishment of the new KSIA forms an integral part of the national logistics platform of the country and as such provide the base for the establishment of a new multi-functional logistics and intermodal transportation node that will provide a range of business, logistics, industry and service opportunities for the region and for the surrounding local areas.

Tongaat CBD

The existing town centre of Tongaat is to be regenerated, consolidated and enhanced to perform the role of a multipurpose business, social services and intermodal transportation terminal centre to serve surrounding urban areas within the northern urban development corridor as well as provide higher order services and transport services for the rural hinterland to the west.

Opportunity Areas

The establishment of the KSIA/Dube Trade Port as a major national air logistics hub will drive both the development of new and existing industrial areas to accommodate manufacturing (non-noxious industry) and logistics related industrial activity in the Northern Municipal Planning Region (NMPR). This development needs to be directed in a manner that contributes positively to the consolidation of existing successful industrial areas as well as to the restructuring of the northern metropolitan area with respect to the development of new well located employment zones. The existing and future industrial opportunity areas are intended to be non-noxious and should be developed in the following manner:

- **Dube TradePort**
  New manufacturing, business parks, logistic park and agricultural processing node
- **Dube Inyaninga**
  New logistics park and agricultural processing node
- **Dube North**
  New logistics, business park and agricultural processing node
- **Tongaat Town**
  Consolidate manufacturing and services
- **Tongaat North/uShukela Highway**
  New logistics and business park

Table 7: Tongaat and Dube TradePort Local Area (Urban)

Role in the Metro	• International/national logistics infrastructure and support zone • National, provincial and local Gateway • Industrial Expansion Zone • Specialised and Intensive Agriculture • Mixed density and mixed income residential expansion (Tongaat) • Conservation of environmental assets • Consolidation, protection and enhancement of the environment resource assets base located in the mid reaches of the Tongati catchment • Consolidation of agricultural and rural hinterland in support of UDL management, protection of rural lifestyles • Hinterland water based metropolitan level recreation related to environmental assets and the Dudley Pringle • Dam
Development Spines and Nodes	• Establish R102 Metropolitan Development Corridor between Verulam Town Centre and Tongaat • Establish KSIA/DTP as primary logistics installation and intermodal transportation node • Consolidate and enhance Tongaat Town centre as sub metropolitan service node and public transportation terminal • Establish new services and industrial/logistics node at Inyaninga as support to R102 metropolitan development corridor and DTP logistics park

Movement System	• N2, R102 and M4 provide regional access and linkage system • Bypass systems east or west to Tongaat Town Centre to be established in accordance with demands on the R102 • system • Establish R102 interchange and access via N2/ Dube Trade Port link road • New spine between M41 and M27 / Dube Trade Port to facilitate movement and alleviate congestion on M4
Land Use and Density	• Consolidate existing formal settlements through renewal and densification along the metropolitan spine (R102) • Establish new mixed density residential areas in undeveloped zones • Upgrade informal settlements • Establish new mixed use high density housing developments along the R102 development spine (minimum 50du -70 du/ha) subject to noise constraints • Establish new industrial opportunity areas at Inyaninga, North-west of Dube Trade Port, on northern boundary at Frasers • Protect and enhance sustainability of high yielding agricultural areas through promotion of intensive agriculture
Open Space/Environment	• Consolidate and protect environmental assets surrounding the Dube Trade Port • Protect, manage and enhance open space and riverine systems within urban settlements to provide ecological services delivery and “break” in continuous urban settlement • Protect, conserve and enhance open space asset footprint contained in the Umdloti and Tongati catchments • Establish local recreational opportunities associated with the open space asset base and Dudley Pringle Dam
Service Levels	• Upgrade and/or consolidate capacity of waterborne sanitation to accommodate proposed increased densities • Proposed expansion of residential and industrial areas • Investigate electricity capacity with respect to proposed increase in density, expansion of residential and industrial areas and development of agricultural areas • Investigate water supply capacity with respect to proposed increase in density, expansion of residential and industrial areas and development of agricultural areas • Investigate capacity of telecommunication capacity with respect to increase in density and proposed expansion of urban areas • Investigate capacity of water supply, electricity and telecommunications commensurate with proposed agricultural and industrial development

c) Tongaat-DTP Local Area Plans: North Urban Development Corridor

Background

The Local Area Plan (LAP) for the Tongaat-DTP area is one of three LAPs prepared as part of a spatial and transport planning project for the Northern Urban Development Corridor (NUDC), situated in the northern planning area of the eThekwini Municipal area. This section focuses on the Tongaat-DTP local area. The LAP is situated within the municipality’s hierarchy of plans below the NSDP.

The spatial aspects of the LAP for the Tongaat-DTP area have been undertaken in parallel to an intensive transportation planning exercise, focused around the upgrading of the R102 to accommodate the new KSIA and DTP and associated development that is likely to evolve of time in the surrounding area.

Vision

The Tongaat-DTP LAP is a key component of the NUDC. It will be developed as a mixed-use development corridor which will consolidate existing and anticipated future population and economic growth in the northern metropolitan area into a spatial pattern that reinforces the new airport node as an internationally competitive 'Aerotropolis' whilst simultaneously establishing and/or enhancing the roles and characteristics of established and/or new development nodes, spines and neighbourhoods. It will do this through the integration of existing development with new opportunities for housing, business, industry, commerce and logistics through an efficient transport oriented urban form and through transportation systems and networks that will be multimodal and will promote the increased use of public transportation and accommodate the efficient movement of freight.

The urban form will be more compacted and structured and it will be punctuated by an integrated open space system that provides for the protection of biodiversity and for the recreational and cultural needs of the local and metropolitan population, whilst enhancing the resilience of the natural systems and local communities with respect to the implications of global climate change phenomena. The relatively undeveloped state of most of the land within the study area and most of the sub-areas within it, provide the opportunity to establish a settlement structure and form that will be distinctive and which sets a new precedent for the way living and working environments are developed and managed.

A-3 DETAILS OF THE APPLICANT

The details of the project applicant are:

Name of Applicant	Postal Address	Relevant Numbers
Dube TradePort Corporation Contact Person: Ms Saxen van Coller	P.O Box 57757 King Shaka Airport 4407	Tel: (032) 841 0000 Fax: (032) 814 0100

A-4 NEED AND DESIRABILITY OF THE PROJECT

DTP Corporation intends to develop the site, which is referred to as the second phase of the TradeZone, or TradeZone 2. The TradeZone forms part of a larger development commonly referred to as The Dube TradePort (DTP) which extends over a landholding measuring 2 040 hectares. The DTP development has been designed as a world-class business, freight and passenger logistics facility that will create a highly competitive operating environment that will be geared to attract a wide range of investors, operators, users and tenants.

Phase 2 involves the provision for the relocation of the South African Air Force from the 'old' Durban International Airport, which is of national importance. Office space, workshops, hangars and a range of facilities associated with an Air Force Base would need to be built. The DTP currently consists of a number of development precincts. These precincts include the KSIA, TradeZone including Cargo Terminal, AgriZone, and Dube City. These precincts are illustrated in the figure below.

Figure 2: The Dube TradePort Site

The DTP precinct has a 50-year or a 2060 master plan in place, which would allow the airport precinct to be fully developed to handle up to 40 million passengers per annum, and up to over a million tonnes of cargo freight. The DTP TradeZone precinct can also be described as Portion 9 of the Farm La Mercy No 15124. The entire TradeZone area comprises of approximately 240 hectares. The cadastral boundary of the TradeZone, or Portion 9, is illustrated in the figure above.

Due to the fact that only a portion of the TradeZone 1 (~26 hectares) has zoning (Special Zone 10) which allowed for development, only this portion was included in the initial environmental impact assessment for the first phase build of the DTP site. Approximately 26ha of land was platformed and serviced and released to the market as part of TradeZone 1.

The new DTP incorporating the KSIA not only provides for an increased number of passengers and direct international flights, but critically, a new trade and logistics gateway for Southern Africa. It is therefore important to ensure this foundation and the associated significant investment that has been made is fully utilized and supported. For this reason, the proposed TradeZone 2 development will significantly contribute and complement this existing infrastructure that has been created. Furthermore, the development will also utilize and support the much needed new link road that is currently under construction as well as the proposed Maintenance Repair and Overhaul (MRO) facility for large aircrafts, currently under review by the DEA.

The greater La Mercy region, where the KSIA is located has, for some time, been identified for light industrial, new housing, economic and employment opportunities. The proposed development proposal aims to unlock these opportunities and in so doing contribute to the Dube Aerotropolis[3] development plans. There is a substantial amount of existing and/or new service infrastructure proposed for this area and this development would therefore contribute towards the effective use of this infrastructure's capacity.

[3] KSIA is a core piece of infrastructure with access to sea, road and rail linkages, within one of Southern Africa's strongest regional economies.
DTP development strategy will guide the development of the entire Airport City and create significant opportunities for all businesses in surrounding area (www.thdev.co.za/developments/aerotropolis/overview).
An Aerotropolis is a new layout of urban form comprising of aviation intensive businesses and related enterprises extending up to 25 kilometres outward from major airports (http//:en.wikipedia.org/wiki/Aerotropolis).

SECTION B:THE RECEIVING ENVIRONMENT

In order to, with any level of confidence, assess the potential impacts of the proposed development on the receiving environment, one needs to first assess the baseline conditions found over the study area. Using this *Status Quo* one can then, broadly speaking, determine the likely impacts that will emanate from a specific development typology on a well-defined receiving environment.

B-1 BIOPHYSICAL ENVIRONMENT

B-1.1 Geology and Geotechnical Suitability

Geosure (Pty) Ltd conducted the Geotechnical Assessment of the site (refer to Appendix 6). The following is information is extracted from the Geotechnical Assessment:

a) Geology and Sub-soil Conditions

The site generally comprises fill, alluvial, colluvial and residual soils overlying weathered sandstone and shale bedrock of the Vryheid Formation. It is observed that much of the site is underlain by sandstone with a roughly oval shaped outlier of shale underlying the site towards the northern portion of the site.

The subsoil conditions can be described as follows:

- The clayey sub-soils are moisture sensitive and will heave when wet. When wetted, it may need to be spoiled during earthworks. These soils will also be impassable to construction traffic, both during and after periods of rainfall.
- The clayey sub-soils are also likely to show signs of heave and appropriate precautions will need to be put in place, in order to avoid damage to structures.
- Generally, poor sub-grade conditions can be anticipated for roads due to clayey sub-soils.
- The clayey sub-soils are likely to have low percolation rates, rendering these unsuitable for stormwater soak pits.
- Shallow groundwater conditions along valley heads and drainage lines. A perched water table may be present, both during and after periods of rainfall.
- Thick layers of un-compacted fill were identified at various positions.
- These will need to be excavated and replaced in engineered layers.
- Large stockpiles of material were identified on site that will need to be moved during development.
- The shale bedrock is likely to slake when exposed to the weather.
- Cuts along east and south-east facing slopes will need to be carefully assessed for day lighting bedding planes that could lead to instability.
- Subbase and base materials for roads will need to be imported to the site and also possibly selected fill of at least G7 quality in terms of TRH14 (1985).

b) Groundwater

A perched groundwater table can be expected, particularly during and after periods of rainfall and during the wet season. The groundwater seepage can be particularly strong under these conditions, with associated embankment/trench sidewall collapse as a result.

Wet and marshy conditions can be expected along valley heads and drainage lines often identified by dense vegetation.

c) Conclusion

Based on the results of the fieldwork undertaken during this investigation, it is considered that this site is generally stable and suitable for development, provided that the recommendations given in this report are

adhered to.

B-1.2 Soils and Agricultural Potential

TerraSoil Science cc was appointed to conduct the agricultural assessment for the development site (refer to the Agricultural Assessment in Appendix 6).

According to the findings of the Agricultural Assessment, two land types are found on the site i.e. Dc57 (dominant) and Ab144 (Land Type Survey Staff, 1972 – 2006). A description of the land types in terms of soils, land capability, land use and agricultural potential are discussed below:

a) Land Type Dc57

- *Land Type – General:* Dc land types accommodate areas dominated by duplex soils of the Estcourt, Sterkspruit, Swartland and/or Valsrivier forms. The Dc land types indicate areas where more than 10% of the landscape is composed of melanic, vertic or red structured soils.
- *Soils:* Predominantly shallow duplex soils with a distinct increase in clay content for surface to subsurface horizons in most landscape positions. Foot slope and valley bottom positions are dominated by wetland (soils with distinct hydromorphism) and recently transported (stratified) soils as well as distinct erosion channels.
- *Land capability and land use:* Almost the entire landscape has been transformed however and is currently used for the production of sugarcane. The sugarcane production extends into areas that qualify as wetlands.
- *Agricultural potential:* Medium to high depending on soil depth. The sugarcane production is predominantly dry land and as such yields of 40 to 60 tons per hectare are normally obtained. Higher lying areas are characterised by shallow and rocky soils and yields are normally lower than on the deeper soils on the foot slopes. This is also due to the increased water availability to the crop on lower slopes.

b) Land Type Ab144

- *Land Type – General:* Ab land types accommodate areas where red dystrophic and mesotrophic soils dominate.
- *Soils:* Predominantly deep red sandy soils derived from old dunes. Valley bottom positions are dominated by wetland (soils with distinct hydromorphism) and recently transported (stratified) soils as well as distinct erosion channels.
- *Land capability and land use:* In the natural state the soils are predominantly used for intensive grazing purposes. Almost the entire landscape has been transformed however and is currently used for the production of sugarcane. The sugarcane production extends into areas that qualify as wetlands.
- *Agricultural potential:* Medium to high depending on soil depth and slope. The sugarcane production is predominantly dryland and as such yields of 40 to 60 tons per hectare are normally obtained.

c) Topographic Parameters

There is a large elevation variation on the site and distinct drainage features drain the site to the north. The slope map (Figure 3) indicates that large areas of the site have slopes that exceed 10 degrees. These sloped areas pose significant risks in terms of tillage and crop production induced erosion. The erosion pressures on the site are evident in the massive erosion effects observed in the stream and drainage channels.

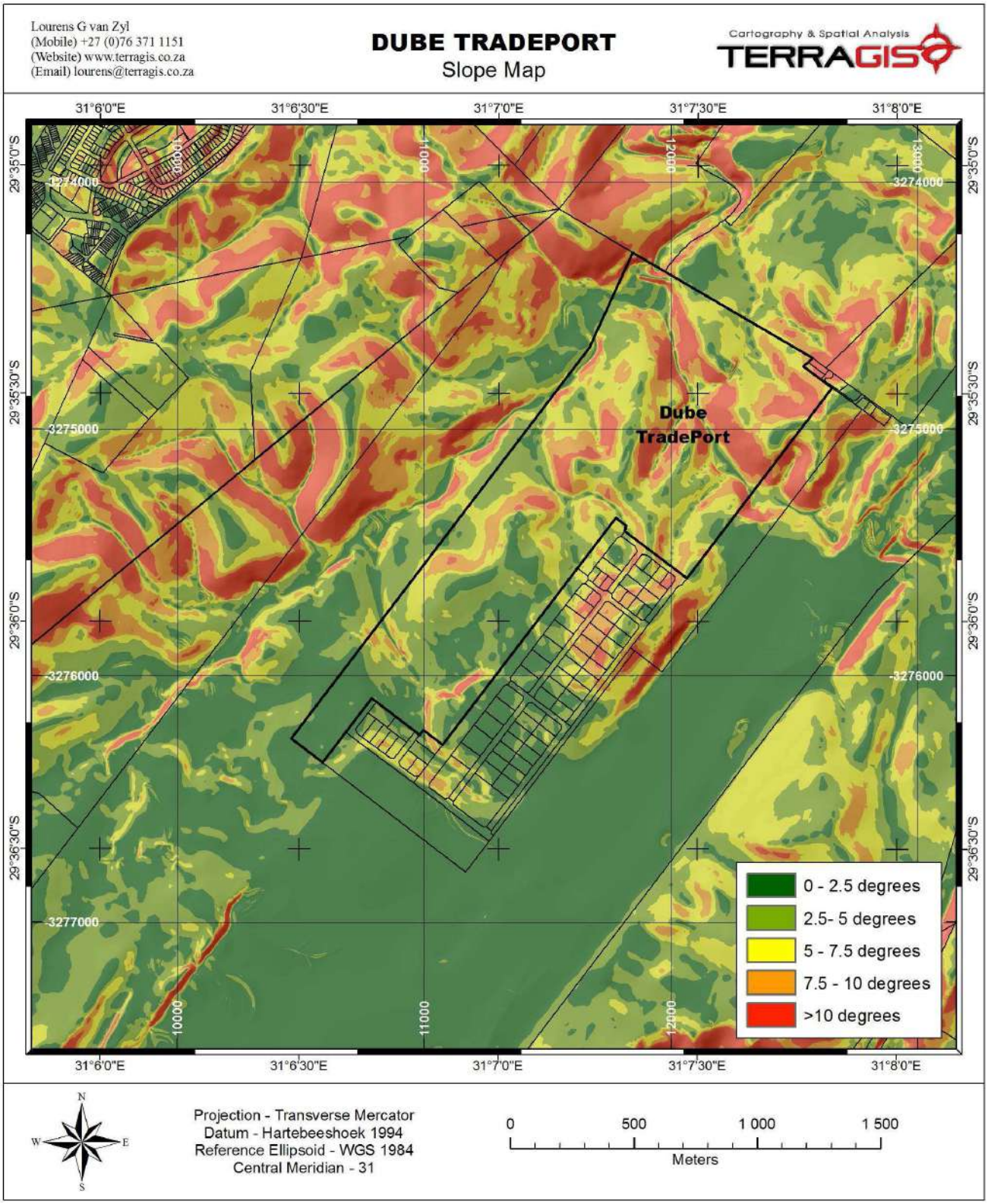

Figure 3: Slope Map for the Study Area

d) Agricultural Potential of the Site

The agricultural potential of the site varies according to soil depth. This in turn is dependent on the position in the landscape with soils on crests being generally shallower than soils on lower and less steep slopes. The shallow soils will yield sugarcane yields of less than 40 tons per hectare and the deeper soils can yield up to 60 tons per hectare, or even higher in the case of red structure soils (that were not found on the site). The land use mimics the agricultural potential in that very rocky areas on the crests have been excluded from

sugarcane production in the past. The steep slopes are problematic in terms of the maintenance of the production potential, mainly due to the degradation effect of successive erosion. The road construction activities have had a very big negative influence on the production potential of the site. This is mainly in the form of loss of suitable land as well as the compartmentalisation of the land through new no-go areas.

e) Soil Potential Linked to Current Land Use and Status

The current land use in the form of dryland sugarcane production is the optimal use for the land. Although other crops can be produced on the red structured soils their production potential will be limited on the shallower and duplex soils (dominating the specific site). Irrigated land uses are not advised for most of the site as the slopes are such that distinct erosion is predicted. The duplex and shallow soils are prone to erosion and cultivation of these soils should only continue in the presence of a dedicated land management plan in terms of erosion control and mitigation.

f) Impact of the Land Use Change on the Surrounding Area

The envisaged land use changes should not impact on the surrounding area if all relevant activities are contained within the development area. Storm water management should be adequate and such that no additional erosion is caused in downstream areas. In terms of agricultural activities and current land use, the impacts of the land use change is considered to be negligible on the surrounding areas.

B-1.3 Topography and Hydrology

B-1.3.1 Topography

The topography of the Trade Zone 2 area is characterised by highly dissected undulating coastal plains, covered to a great extent with sugarcane, vegetation, wetlands and watercourses. The area generally slopes towards the Hlawe River, which runs west of Trade Zone 2, with tributary streams intercepting and running across the proposed area and draining into the Hlawe River. The current topography at Trade Zone 2 is characterised as fairly hilly in gradient, with varying sloped undulations from the Trade Zone 2 Cargo area to the General Aviation Area.

B-1.3.2 Hydrology

a) Floodline Determination Assessment

Sivest Civil Engineering Division undertook a Floodline Determination Assessment for the site. Refer to this assessment in Appendix 6.

Eleven sub-catchments were identified within the study area. A minimum contributing area of 1 km^2 was used as a threshold value to for catchment delineation. River reaches were defined using these sub-catchments along with flow accumulation and river segmentation analysis (see **Figure 3 of Appendix 6: Flood line Determination**). Each sub-catchment is associated with a single river reach however flood lines were only determined for seven applicable reaches (see **Figure 4 of Appendix 6**).

The 2m eThekwini contour dataset was used to generate an elevation model of the study area (see **Figure 6 of Appendix 6**). This model indicates the channel is well defined in the north eastern portions (see **Figure 7 of Appendix 6**) of the study area and also shows the northern side of the Hlawe River is more undulating than the southern side.

Maps indicating the location of the 1: 100 year floodlines and inundation are attached in Appendix A1 and A2. It is recommended that no development takes place within the defined 1 in 100 year floodline. It is also

recommended that a 20m safety buffer is imposed on the 1: 100 year floodline to ensure full compliance with the DWA policy[4].

Flooding risk and hazard ratings are directly linked to probability of occurrence / flood frequency. Ultimately areas closer to the stream are exposed to more risk than areas further away. In order to signify this risk the 1:10, 1:50 and 1:100 flood peaks were modelled. Areas within the 1:10 year flood line at more risk to flooding than the 1:50 and 1:100 flood lines. The results of this analysis are show in **Appendix A3 of Appendix 6: Floodline Assessment**. Due to the incised nature of the channels the distance between the various flood lines is relatively small. Thus, the specialist's original recommendation that no development takes place within the defined 1 in 100 year flood line and protective buffer remains relevant.

b) Wetland Delineation and Functional Assessment

A Wetland, Offset and Rehabilitation Strategy was conducted by Wetland Consulting Services (WCS) (Pty) Ltd in October 2013. Refer to Appendix 6.

The proposed TradeZone 2 development is located within quaternary catchment U30D – Tongaati River Catchment of the KwaZulu-Natal Foreland Hydrological Region (DWAF, 2008). Water runoff from the study area feeds into the upper tributaries of the Hlawe River which drains in a north-easterly direction into the Tongaati River approximately 3.5 km downstream of the site and ultimately into the Indian Ocean. According to Freshwater Ecosystem Priority Areas (FEPAs) for the country, rivers and wetlands within the study area are not considered to be Freshwater Ecosystem Priority Areas (SANBI, 2011). Wetlands FEPA's are however located downstream of the site, after the confluence of the Hlawe and Tongaati River systems.

The results of the Wetland Delineation that was conducted according to *"A Practical Field Procedure for Identification and Delineation of Wetland and Riparian areas – Edition 1 (DWAF, 2005)"* identified the following wetland HGM units on the site:

- Six Unchannelled Valley Bottom Wetlands;
- Three Channelled Valley Bottom Wetlands;
- Three Hillslope Seep wetlands; and
- One Riparian B-channel.

Refer to Figure 4 for an illustration of the wetlands that occur on the site.

[4] Policy and Guidelines for Developments within Floodlines.

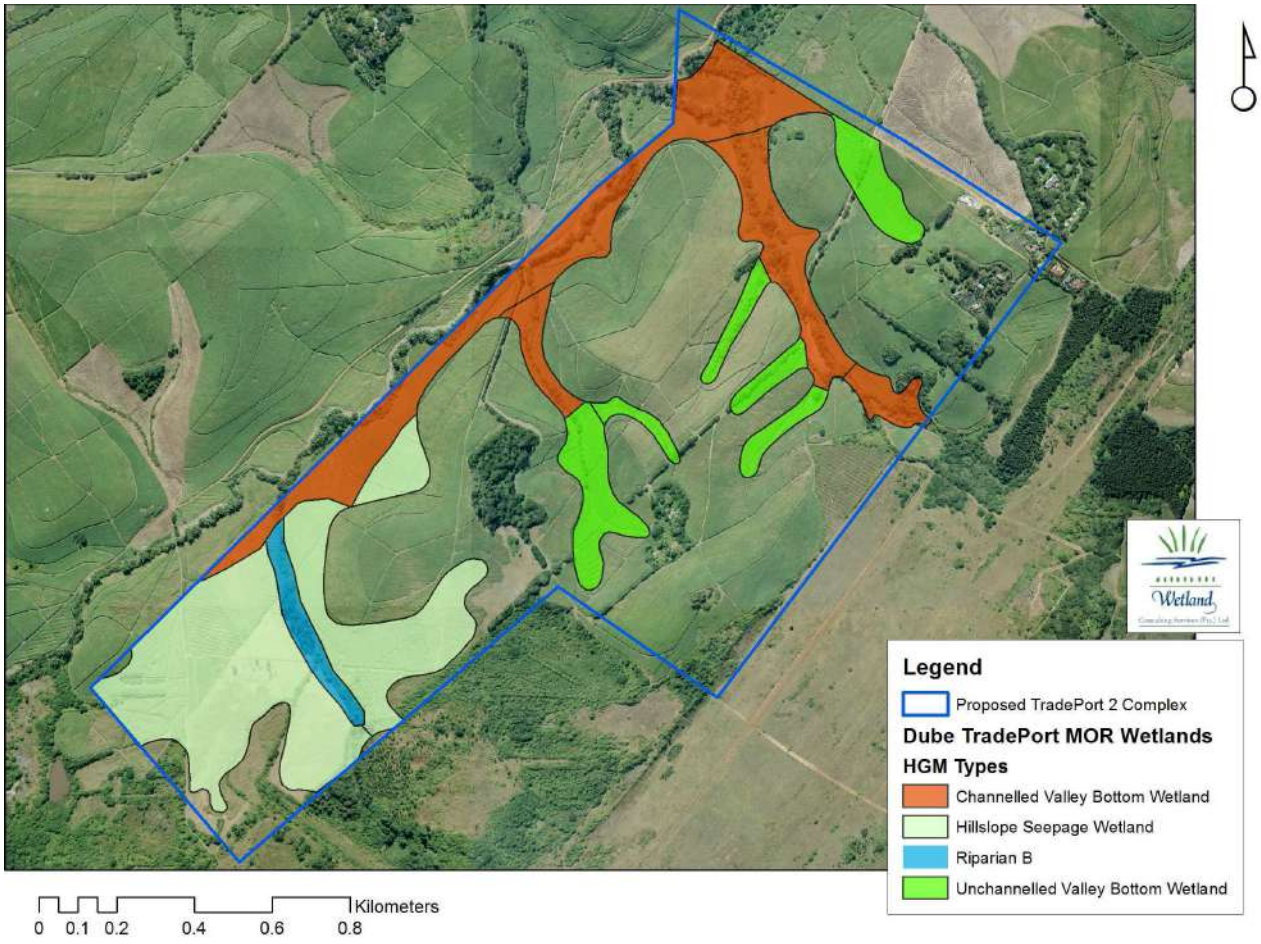

Figure 4: Distribution of Wetlands within the Study Area

Wetland Functional Assessment

a) Hillslope Seepage Wetlands

Hillslope seepage wetlands are predominantly associated with the sandstone derived soils and typically reflect the presence of seasonal, shallow interflow. They support conditions that facilitate both sulphate and nitrate reduction as interflow emerges through the organically rich wetland soil profile, and are thus thought to contribute to water quality improvement. They typically represent low energy environments where soil moisture conditions remain high throughout the year and can accumulate carbon. The presence of hillslope seepage wetlands indicates the emergence of water that is retained in the landscape but which is moving in the subsurface, with the rate of flow being a function of head, slope, soil depth and porosity. Because of this relationship hillslope seepage wetlands are often linked with flow augmentation.

The most important ecoservices provided by the seepage wetlands within the development site were streamflow augmentation, erosion control and water quality enhancement. These scores were, however, **Intermediate** with the other scores **Low and Moderately Low**. The original vegetation has been entirely replaced by sugarcane, and the biodiversity maintenance score is possibly exaggerated.

b) Unchannelled Valley Bottom Wetlands

Unchannelled valley bottom wetlands reflect conditions where surface flow velocities are such that they do not, under existing flow conditions, have sufficient energy to transport sediment to the extent that a channel is formed. Within the context of the site, and associated mostly with historic landuse, most of the valley bottom systems have undergone a degree of channel incision. The core driving processes of subsurface lateral seepage and diffuse surface flow from the surrounding catchment are still operating, and in many cases the channel bed has stabilised and re-vegetated, allowing diffuse flow longitudinally through the wetland and

maintaining a level of wetland functioning, albeit depleted. It is expected that these systems play a role in retaining water in the landscape and slowly releasing this water to downstream reaches (streamflow augmentation) as well as in contributing to influencing water quality through for example mineralisation of rain water. These wetlands could be seen to play an important role in nutrient removal, including ammonia through adsorption onto clay particles. Extensive areas of the unchannelled valley bottom wetlands are also characterised by subsurface flows, which allow these wetlands to support conditions that facilitate both sulphate and nitrate reduction as interflow emerges through the organically rich wetland soil profile, and are thus thought to contribute to water quality improvement.

The results indicate that wetland functioning has been considerably compromised by the prevailing landuse. Streamflow augmentation is underscored, while the flood attenuation component appears to be somewhat inflated. The values obtained for water quality enhancement are lower than expected. The scores obtained are mostly **Low and Moderately Low.**

c) Channelled Valley Bottom Wetlands

Channelled valley bottom wetlands, through the erosion of a channel through the wetland, indicate that sediment loss and export is the dominant process, rather than sediment trapping. Erosion may be both vertical and/or lateral and reflect the attempts of the stream to reach equilibrium with the imposed hydrology. From a functional perspective channelled valley bottom wetlands can play a role in flood attenuation when flows over top the channel bank and spread out over a greater width, with the surface roughness provided by the vegetation further slowing down flood flows. Some sediment trapping can occur during flood flows, though under intermediate flow conditions they contribute sediment to downstream reaches. These wetlands play only a minor role in the improvement of water quality given the short contact period between the water and the soil and vegetation within the wetland. The results of the functional assessment support these statements, with the scores being **Low to Intermediate**. The biodiversity component is improved by the fringe of riparian and remnant wetland vegetation usually associated with the channel.

Impacts Undermining Wetland Ecological Integrity

The wetlands were assessed in terms of ecological integrity for each of the driving processes, namely:

- Hydrology
- Geomorphology, and
- Vegetation.

Table 8 presents a summary of the impacts that are considered to be undermining the various HGM type's ecological integrity. The landuse is essentially the same (*sugar cane plantations*), and hence the impacts tend to be similar across the wetland types. The scores obtained from the Wet - Health assessment are a reflection of the magnitude of the respective impacts.

Table 8: Summary of impacts undermining Wetland Ecological Integrity

Valley Bottom Wetland	Impact
Hydrology	• Canalisation introduced by a combination of change in the runoff conditions in the catchment and drain excavation; • Periodic bare soil surfaces increasing runoff potential; • Confinement beneath road culverts; • Runoff from hardened surfaces in the catchments; • Point-source discharge of surface runoff into wetlands from infrastructure; • Interception of diffuse flow by linear features such as roads and drains; • Alien plants within the wetland, increasing direct water losses; • Sugarcane in the catchment and in the wetland, increasing water losses to evapotranspiration and biomass accumulation; and

	• Herringbone drain and ridge-and-furrow networks.
Geomorphology	• Erosional features below road crossings; • Lateral erosion from drain point-source discharge; • Periodic bare soil surfaces providing a source of sediment; and • Channel incision.
Vegetation	• Alien plant species infestation; and • Complete removal of native vegetation and replacement with sugarcane.
Hillslope Seep	**Impact**
Hydrology	• Sugarcane in the catchment and in the wetland, increasing water losses to evapotranspiration and biomass accumulation; • Herringbone drain and ridge-and-furrow networks; • Periodic bare soil surfaces increasing runoff potential; and • Periodic bare soil surfaces increasing runoff potential.
Geomorphology	• Periodic bare soil surfaces providing a source of sediment; • Erosion faces initiated by drain excavation; and • Change in runoff potential associated with bare soil following harvest and during first 6 months of growth.
Vegetation	• Complete removal of native vegetation and replacement with sugarcane.

The vegetation has been Critically Modified simply because it has been completely removed. Generally the geomorphology component is stable, and has been **Slightly to Moderately Modified**. The soils are not duplex, and have a low erosive threat. The high rainfall regime and long growing season also encourages rapid growth and stabilisation. The hydrological impacts sustained have been severe, and the hydrology component of wetland health has been **Largely to Greatly Modified**.

Wetland Ecological Importance and Sensitivity (EIS) Assessment

All of the wetlands were deemed to have **Low to Marginal** ecological importance and sensitivity due to:

- The extensive removal of the original wetland vegetation and its replacement with sugarcane;
- Infestation of the riparian vegetation by alien plants;
- Poor ecological connectivity across the landscape;
- Wetland habitat homogeneity across the landscape;
- The drainage of the wetlands, precluding recolonisation by hydrophytes; and
- The lack of suitable “source” areas for wetland flora and fauna.

Refer to the Figure below for an illustration of the EIS of the on-site wetlands. The wetlands fall within the Recommended Ecological Management Class D and the EIS category of Low/Marginal. *This implies that wetlands are not ecologically important and sensitive at any scale. The biodiversity of these wetlands is ubiquitous and not sensitive to flow and habitat modifications. They play an insignificant role in moderating the quantity and quality of water of major rivers.*

c) Wetland Offset Site

There will be infilling of the wetlands on the site as a result of the proposed TradeZone 2 development (*should the Developer’s preferred alternative be approved*). It is therefore envisaged that rehabilitation and restoration of wetlands at a suitable candidate (*off site offset*) site be implemented to ecologically counterbalance the wetlands removed through the activities associated with the development. The candidate site occurs on north of the study area within the same Tongaat catchment. The acquisition of the candidate offset wetland property (*candidate offset site*) by the applicant will only be undertaken once approval by the DEA and the relevant environmental authorities i.e. eThekwini Municipality, EKZNW and DWA.

Several candidate wetlands were identified to the north of the site (refer to Figure 5).

These are considered suitable due to the following reasons:

- They are in the same catchment, feeding the Tongati River;
- They are situated in close proximity to the wetlands that are to be removed. The ecological benefits accrued by rehabilitation are therefore likely to be conferred directly to the landscape that has undergone a loss in wetland functioning;
- They consist mostly of the same hydrogeomorphic units as those that fall within the development site (refer to Figure 6). The large seepage wetland in particular is important because it is sensitive to changes in catchment hydrology, and it is impossible to replicate. The identification of large seepage wetlands in the candidate site provides a valuable opportunity to offset the loss of the large onsite seepage wetland. The similarity of the HGM units also increases the likelihood that the same important ecological services forgone by the development will be reinstated by rehabilitating the candidate wetlands.
- The candidate wetlands consist of one floodplain component (F1), several hillslope seepage (HW) wetlands connected to watercourses and several unchannelled valley bottom wetlands (V1-V9).

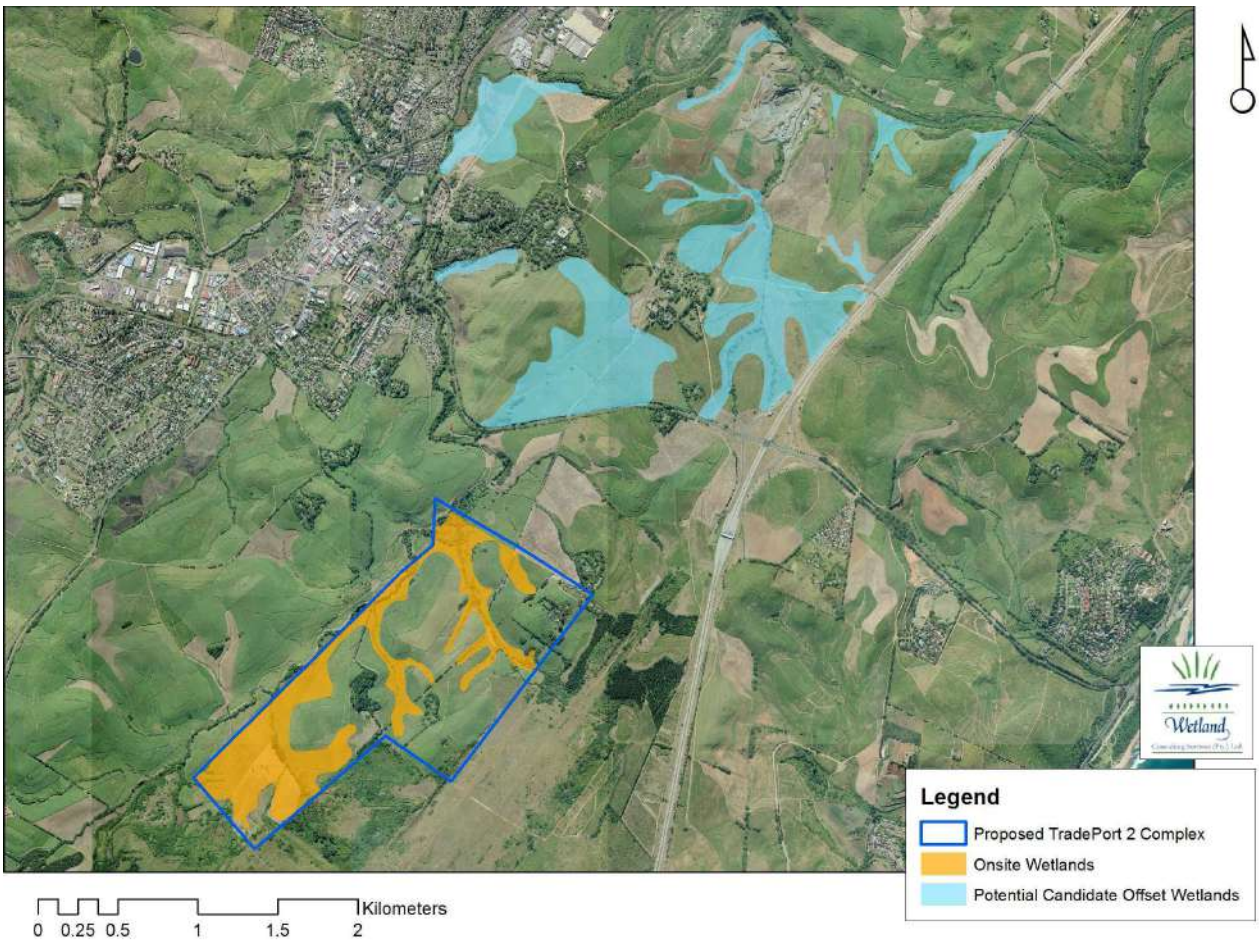

Figure 5: Location of the offsite wetlands relative to the proposed development

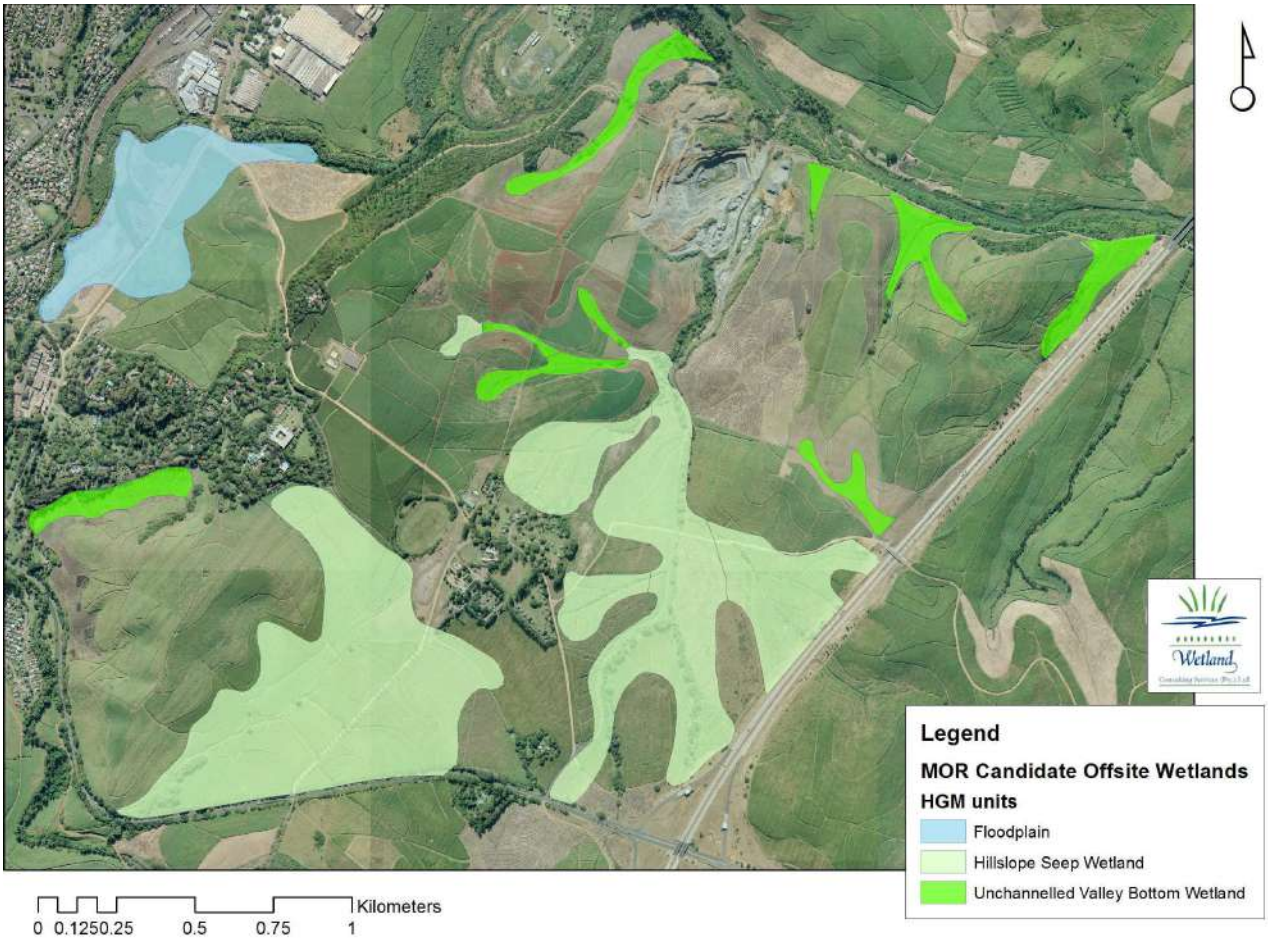

Figure 6: HGM Classification of the candidate wetlands

Present Ecological State of the Wetlands at the Candidate Site

The present Ecological State (PES) of the wetlands was used to calculate the current functional area, or number of hectare equivalents, of the wetlands in both the onsite and candidate area. Rapid assessments were also undertaken of the candidate wetlands under the hypothetical post-rehabilitation scenario, and the gain in hectare equivalents calculated to estimate whether the rehabilitation measures will satisfy the no-net-loss of wetland habitat principle stipulated as the primary goal of offsetting.

The land use is also commercial sugarcane production, and the impacts sustained are the same as those evident within the proposed development site. These are as follows:

- Herringbone and Ridge-and-Furrow excavated drain networks;
- The complete removal of natural vegetation, and its replacement with sugarcane;
- Alien plant infestation;
- Confined flow through road culverts;
- Water losses via evapotranspiration and biomass accumulation by sugarcane in both the wetland and the catchment;
- Interception of flow by roads, swales, contours and drains;
- A change in the runoff characteristics associated with periodic bare soil surfaces; and
- High nutrient loads entering the wetland from the surrounding agricultural lands.

Calculation of Hectare Equivalents

Most environmental authorities advocate a no-net-loss of resources approach, be it to biodiversity or wetland functioning, and the hectare equivalent provides the conceptual means of judging whether these rehabilitation

objectives have been satisfied. The approach advocated by the recently released SANBI document "*Towards a best practice guideline for wetland offsets in South Africa"* (MacFarlane et al, 2012) was used to determine the target offset.

Rehabilitation Strategy for the Candidate Wetlands

The rehabilitation strategy, which serves as a precursor to a rehabilitation plan, comprises a description of the types of measures to be investigated once the authorities are satisfied that the approach has the potential to appropriately offset the wetland losses associated with the development. A subsequent rehabilitation plan would entail detailed and complimentary input from a suitably qualified environmental engineer and a wetland ecologist. The ecologist would be responsible for identifying problems undermining the hydrological, geomorphological and vegetative integrity of the habitat on the site and deciding on appropriate measures to address these. The engineer would be responsible for designing appropriate earthen, gabion and/or concrete interventions to achieve the objectives outlined by the wetland ecologist. For the purposes of this study the rehabilitation strategy will consist of:

- An evaluation of the problems undermining wetland ecological integrity of the candidate wetlands; and
- A description of the types of interventions required to address these problems and reverse their influence. These may consist of hardened structures such as gabions, concrete weirs, rock-masonry structures and reno-mattresses, or softer structures such as ecologs and earthen berms.
- Determination of required regulatory approvals such as water use licence for any structures within the wetlands.

Rationale behind the Compensatory Hectare Equivalents

The underlying principle is that the hectare equivalents gained by these measures should appropriately offset those removed by the development. However, there is a considerable risk of failure of rehabilitation or wetland creation measures. The risk may be associated with shortcomings in the implementation of rehabilitation interventions or future changes in the catchment landuse. To account for the risk of failure, the current guidelines suggest a divisor be attached to the candidate wetlands. This usually increases the area of wetland to be rehabilitated, the rationale being that this will counterweigh any potential failure of individual rehabilitation measures to meet their objectives.

The SANBI offset guidelines separate the offset target into two subparts, namely:

- The wetland functioning target, which represents the gain in wetland functional area that is required to ensure a no-net-loss of wetland functioning from the landscape. This is the first priority of any wetland offset programme. It employs the risk of failure divisor and the temporal risk divisor; and
- The conservation target, which incorporates the conservation, threat status or protection multiplier. This ensures that there is a no-net-loss or a net gain in biodiversity value for the local landscape following the development.

Internationally, a ratio of at least 1:1.5 is generally needed to achieve 1:1 compliance on the ground, but there has been a recent tendency to adopt higher mitigation ratio's, to a maximum of 1:10, depending on the state of the wetland being impacted upon and the risk of failure of the mitigation (NRC 2001). In their guideline for wetland offsets, SANBI (under review, 2012) recommend a range of multipliers that are closely tied to the conservation status of the NFEPA classification for South African wetlands, as well as that of South African vegetation types as referenced in Mucina and Rutherford (2006). The wetlands within the site fall within the Indian Ocean Coastal Belt Group (2), and have a Critically Endangered threat status. This carries a 30:1 multiplier (or conservation multiplier, indicating 30ha-eq of wetland functional area returned to the landscape for every 1 ha-eq of wetland functional area removed).

According to the recently released SANBI wetland biodiversity offset document (MacFarlane et al, 2012), the target offset should consist of two components, namely:

1. The wetland functioning offset. This is aimed at satisfying the no-net-loss of wetland functioning

requirement and carries a 1:1 multiplier. The target objective should hence be a gain in wetland hectare equivalents equal to those lost to the development.

2. A protection-based, or conservation, offset. This is aimed at a no-net-loss or, preferably, a net-gain in wetland biodiversity for the landscape and adds a threat status multiplier to the hectare equivalents lost to the development.

The concept of the latter offset target is sound, but the method of calculating the magnitude of the multiplier is still under debate. This study therefore ***concentrated only on evaluating the potential for the target wetlands to satisfy the functional area offset*** for the development. The determination of the protection based offset should be revisited once there is consensus on its calculation.

Target Wetland Functional Area Gains Required

The wetland functional area of each HGM unit within the study site was calculated under the current scenario. The respective hectare equivalents values, as well as the total are presented in Table 5.1 of the Wetland Offset Report. Hectare equivalents (ha-eq) are a quantitative expression of a wetland's ecological integrity, even though it is based on largely qualitative data. It is an amalgamation of the wetland health scores and the area of the wetland. In total, the wetlands within the study site represent 30.0 hectare equivalents of functional wetland area. To ensure a no-net-loss of wetland functional area from the local landscape, a gain of 30 ha-eq of wetland ecological integrity needs to be obtained through the successful rehabilitation of the candidate wetlands.

There is an inherent risk of failure associated with rehabilitation, due to arrange of factors such as incorrect construction of interventions, incorrect timing of implementation and unseasonal rainfall. To allow for the risk of failure to achieve the desired offset, a multiplier is applied depending on the type of offset applied (refer to Table 5.2 of the Wetland Offset Report). For rehabilitation this multiplier is 1.5, bringing the target functional area gain to 45ha-eq.

There is also a temporal multiplier. This is aimed at preventing losses in wetland biodiversity resulting from the removal of wetland habitat before suitable replacement habitat has been provided for recolonisation. The most likely scenario is that wetland rehabilitation will be completed 5 years from the impacts from the development taking place, rendering a multiplier of 1.5. This takes the target he-eq gain to 67.5ha-eg. However it should be noted that the developer may be able to reduce this target by fast-tracking the rehabilitation project. There is also a case to be made for the development being exempted from this multiplier, the rationale being that the proposed development area does not contain habitat or species of conservation importance, and has a low wetland biodiversity value in general.

Potential Hectare Equivalent Gains

Hypothetical post-rehabilitation Wet-Health assessments were carried out on the candidate wetlands. The results are presented in Table 6.2 of the Wetland Offset Report. The wetlands within the site consist of 153.7ha, and in their current state represent approximately 54ha-eq of functional wetland area. Successful wetland rehabilitation may potentially improve the ecological integrity of the wetlands to the extent that the number of hectare equivalents may be increased to 103.6. This is a potential gain of 49.4ha-eq.

It should be noted that:

- This assumes a reduction in the area of the catchment under commercial sugarcane;
- A vegetation integrity score of 7/10 is considered the maximum possible due to the primary grassland component of intact coastal seeps being essentially impossible to restore;

The functional area gains satisfy the no-net-loss priority requirement of the target offset.

There are also sufficient gains to offset any possible risk of failure of certain interventions. If the temporal multiplier is included, then these candidate wetlands will not meet the target. In the Wetland Ecologist's

opinion (WCS), however, there is no rational reason to include this multiplier since the onsite wetlands are unlikely to support biodiversity components that are not already present in the offset sites.

It should be noted that long-term wetland rehabilitation entails the management of the catchment to ensure that the hydrological regime remains compatible with maintaining the wetlands in their desired state. This places constraints on future landuse. Future developments within the offset site should be carefully planned around the core objective of maintaining the wetland in their post-rehabilitation state.

Summary of Wetland Offset

- The wetland functioning offset target is 30ha-eq, based on the priority objective of securing a no-net-loss of wetland functioning from the landscape;
- The risk-of-failure multiplier is 1.5, which increases the target to 45ha-eq;
- The temporal multiplier is also 1.5, increasing the target to 67.5ha-eq;
- In the Specialist's opinion, applying the temporal multiplier is unnecessary given the low biodiversity value of the wetlands in the proposed development site;
- The proposed offset site contains approximately 154ha of wetland habitat;
- It is considered to appropriately fulfil all of the important requirements for an offsets site;
- Rehabilitation of the wetlands within the site may potentially yield a gain of 49.4ha-eq, this after a conservative estimate of the post-rehabilitation ecological state of the candidate wetlands;
- This will appropriately achieve the no-net-loss functional area target, as well as provide leeway for any potential risk of failure of certain interventions;
- The biodiversity component of the offset, using the threat-status multiplier, was not included in this study because the method of calculation of the multiplier is in the process of being formulated. This should be reviewed once this is available;
- In the Wetland Ecologist's opinion, the candidate site is appropriate and suitable for achieving both the wetland functioning target offset and the biodiversity target offset for the proposed development and should be supported by the authorities.

B-1.4 Climate

The site falls within Bioresource Group 1 – Moist Coast Forest, Thorn and Palm Veld. Rainfall in this area is mainly in summer. Dry periods of several weeks can be expected to occur, and this has an effect on the yield of sugar cane. Summers are hot while winters are mild. Frost is very rare and humidity is very high (Camp, 1997).

The table below provides information on the climate data from 2000 to 2008. The climate data was obtained from the South African Sugar Association (SASA) Experiment station in Tongaat.

Table 9: Climate Data from SASA Experiment Station in Tongaat

YEAR	RAIN (mm)	TMX (°C)	TMN (°C)	RHP (%)	EVP (mm/d)	DBA (°C)	WBP (°C)	RHA (%)	RHP (%)	SUN (h)	WND (km/d)
2000	1300.7	25.9	16.1	71	4.5	18.6	20.7	87	71	6.4	149.7
2001	930.8	26.0	16.0	69	4.9	19.2	20.2	83	69	6.5	141.5
2002	950.3	25.9	15.5	64	4.5	19.2	19.9	81	64	6.3	132.4
2003	596.1	25.8	14.7	65	4.4	19.3	19.9	80	65	6.5	144.5
2004	932.1	26.0	15.6	65	4.0	19.5	20.2	79	65	6.5	122.7
2005	685.1	26.4	15.6	65	3.9	19.8	20.2	80	65	6.1	126.7
2006	1307.1	26.3	15.1	66	3.9	19.7	20.2	80	66	6.2	131.5
2007	894.0	26.0	15.4	64	4.4	19.9	19.9	77	64	6.5	145.8
2008	862.9	25.9	15.7	64	4.1	19.7	19.8	79	64	5.9	126.6

Legend:

TMX Maximum Temperature
TMN Minimum Temperature
RHP Relative Humidity 14h00
EVP A-pan evaporation
DBA Dry bulk 08h00
WBP Wet bulb 14h00
RHA Relative humidity 08h00
RHP Relative humidity 14h00
SUN sunshine hours
WND Wind run

B-1.5 Flora and Fauna

SEF (Pty) Ltd conducted an Ecological Assessment for the proposed development site which focussed on the floral and faunal assemblages on the site. Refer to the Ecological Assessment in Appendix 6.

B-1.5.1 Flora

The study site is located within the Indian Ocean Coastal Belt which covers the seaboard in KwaZulu-Natal and Eastern Cape (Mucina & Rutherford, 2006). The tropical appearance of the vegetation associated with the Indian Ocean Coastal Belt is a result of a mixture of growth forms such as trees, lianas and epiphytes while grass plays a subordinate role in this biome. The land use in this biome is primarily sugarcane farming in KwaZulu-Natal and subsistence farming in the Eastern Cape, which resulted in the loss of vast areas containing natural vegetation. The Indian Ocean Coastal Belt (biome) is divided into smaller units known as vegetation types. According to Mucina & Rutherford (2006), the study area is situated within the KwaZulu-Natal Coastal Belt (refer to Figure 2 of the Ecological Assessment) which occurs only in KwaZulu-Natal from Mtunzini in the north to Margate in the south where the altitude ranges from 20-450 meters above sea level.
The KwaZulu-Natal Coastal Belt consists of dissected undulating coastal plains while some primary grassland still occurs in hilly, high-rainfall areas where there are no pressures from fire and grazing regimes. This vegetation type is affected by very extensive sugarcane fields, timber plantations and residential areas (Mucina & Rutherford, 2006). Important taxa recorded from this vegetation type include *Cyperus natalensis, Eragrostis lappula, Helichrysum longifolium, Senecio dregeanus* while geophytic herbs include, *Kniphofia gracilis, K.rooperi, Pachystigma venosum, Zeuxine africana, Strelitzia nicolai* and trees such as *Anastrabe integerrima* and *Acacia nilotica subsp. Kraussiana*. Two species from this vegetation type have already gone extinct; *Vernonia africana* and *Barleria natalensis* while *Kniphofia pauciflora* is endemic.

a) Vegetation Communities

Four vegetation communities; *disturbed drainage lines, disturbed remnant forest* and *scrub patches, disturbed wetlands*, and *transformed habitat (sugarcane)* and *transformed habitat (construction)* were recorded on site.

1) *Disturbed drainage lines*

Drainage lines were recorded in the lower lying areas of the study site and ranged from small temporary drainage lines with scrub vegetation to larger permanent drainage lines with disturbed riparian vegetation.

Species diversity along the drainage lines was very low due to disturbance and extensive invasions by alien vegetation such as *Eucalyptus, Pinus, Sesbania* and *Solanum mauritianum*. Indigenous species recorded from this section included *Albizia adianthifolia* (Flat-crown), *Trichilia emetica* (Natal Mahogany), *Ekebergia capensis* (Cape Ash) and *Phoenix reclinata* (Wild Date Palm). The larger drainage lines were extensively invaded by *Bambusa balcooa* (Indian Bamboo), *Schinus terebinthifolius* (Brazilian Pepper Tree) and *Montanoa hibiscifolia* (Tree daisy).

2) *Disturbed remnant forest and scrub patches*

Small patches of remnant coastal forest and scrubs were recorded in seven localities within the study area. These forest and scrub patches were highly disturbed and invaded by numerous alien species such as *Eucalyptus* species, *Lantana camara* and *Pinus* species. One patch in the centre of the study area contained old buildings and most of the species recorded from this clump were used for landscaping and included species such as *Jacaranda mimosifolia* (Jacaranda), *Bougainvillea species* and *Eucalyptus* species. Indigenous species recorded from these areas included *Trichillia emetica* (Natal Mahogany) and *Ficus lutea* (Giant Leaved Fig).

Other forest patches within the study area were smaller and supported indigenous species such as *Strelitzia nicolai* (Natal Wild Banana), *Calodendron capense* (Cape Chestnut) and *Vitellariopsis marginata* (Natal Bush Milkwood) although the undergrowth was severely invaded by species such as *Canna indica, Lantana camara, Solanum mauritianum* and *Chromolaena odorata*.

3) *Disturbed wetlands*

Wetland areas found in the study area were highly disturbed or transformed by sugarcane fields and supported limited indigenous vegetation. Disturbed wetlands in the south western section of the study area supported species such as *Cyperus esculentus* (Yellow Nutsedge), *Centella asiatica* (Marsh Pennywort), *Imperata cylindrica* (Cotton Wool Grass), *Eulophia speciosa, Gladiolus dalenii* and the exotic *Mimosa pudica* (Pantrop weed) while wetlands located in the sugarcane fields were devoid of any indigenous vegetation.

4) *Transformed habitat (sugarcane and construction)*

At the time of the survey at the end of October 2012, large scale ground clearing operations were already taking place within the study area and these areas were devoid of any vegetation.

Extensive sugarcane (*Saccharum* species) fields were also present throughout the study area while abandoned sugarcane fields were dominated by weeds such as *Senecio polyanthemoides, Lantana camara, Bidens* and *Conyza species*.

b) Plants of conservation concern

These plants are nationally protected by the National Environmental Management: Biodiversity Act (Act No. 10 of 2004). Within the context of this report, plants that are Declining and Rare are also referenced under this heading.

A minimum of ten (10) plant species of conservation concern have been recorded in the Quarter Degree Square (QDGC) (Raimondo *et al*., 2009; POSA, 2011) and these species including habitat requirements and

likelihood of occurrence in the study area are listed in Table 5. Removal of these plants could require a permit and should be accompanied by either a rehabilitation plan where the plants will be re-established or the plants should be rescued and replanted at a suitable site.

Table 10: Species of conservation concern that could potentially occur in the study area

Species	Conservation Status	Habitat requirements	Likelihood of occurring within study area
Crinum macowanii	Declining	In grassland, rocky areas, near rivers	Likely
Kniphofia littoralis	Near Threatened	Marshy coastal areas	Likely
Cineraria pinnata	Near Threatened	Coastal grassland	Unlikely since the coastal grassland within the study area has been transformed
Elaodendron croceum	Declining	Coastal forests	Likely, although the remaining forest patches are highly disturbed
Lotonis dichiloides	Critically Endangered, Possibly Extinct	Grasslands within the Indian Ocean Coastal Belt	Highly Unlikely since the grassland associated with the study area has been transformed
Hypoxis hemerocallidea	Declining	Grasslands	Unlikely since the grassland in the study area has been transformed. It is however a hardy bulb which can resprout if the topsoil was not disturbed
Disperis woodii	Declining	In coastal grassland	Unlikely since the grassland in the study area has been transformed
Mystacidium aliceae	Vulnerable	In thick scrub in shade	Likely. It could be growing in one of the remaining forest / scrub patches
Adenia gummifera	Declining	Forest and scrub from the coast to 1200m.a.s.l	Likely. Limited suitable habitat within the forest and scrub patches
Cassipourea malosana	Declining	Evergreen forest, thicket and swamp forest	Unlikely. The existing forests & scrub have been heavily impacted on and it is unlikely that suitable habitat is present

c) Provincially Protected Plants

A number of plants are not threatened, but are listed as protected on the KwaZulu-Natal Nature Conservation Management Amendment Act (Act No.5 of 1999). Table 10 lists the protected species which has been confirmed in the study area as well as those for which suitable habitat was recorded.

Table 11: Protected plants identified and which could occur within the study area based on suitable habitat (species in bold were confirmed in the study area)

Species	Conservation Status	Habitat Requirements	Occurrence in study area
Brachystelma species	Protected Schedule 7	Wide range	Likely since the entire genus is protected
All *Gladiolus* species	**Protected Schedule 7**	**Wide range**	**Confirmed, *Gladiolus dalenii***
All *Hyacinthaceae* species	Protected Schedule 7	Wide range	Likely that some species from various genusses protected could occur within the study area
All *Kniphofia* species	Protected Schedule 7	Low-lying areas associated with wetlands, rivers and marshes	Likely although suitable habitat on site was severely disturbed
All species in *Orchidiaceae*	**Protected Schedule 6**	**Wide range**	**Confirmed: *Eulophia speciosa***

A permit from the KZN Department of Agriculture, Forestry and Fisheries (DAFF) – Forestry Directorate, is required should the Protected plants be removed, relocated or destroyed as a result of construction.

d) Alien and invasive plants

Extensive alien invasions were recorded throughout the study area (Table 11) and included *Bambusa balcooa* (Indian Bamboo) in the larger drainage lines with *Canna indica* (Wild Canna) and *Solanum mauritianum* (Bugweed) in the disturbed forest / scrub patches.

Table 12: Protected plants identified and which could occur within the study area (species in bold was confirmed in the study area)

Family/Species	Level	Protection	Occurrence in study area
Amaryllidaceae	Whole genus	Schedule 4: Protected flora	Confirmed
Ammocharis coranica	Species	Schedule 6: Protected flora (section 23)	Highly Likely – plants with similar leave structure recorded, no flowers present to confirm species
Apocynacea	**All *Pachypodium* species**	Schedule 4: Protected flora	**Confirmed (*Pachypodium succulentum)***
Boophone disticha	Species	Schedule 6: Protected flora (section 23)	Highly Likely
Euphorbia obsea	Species	Schedule 4: Protected flora	Likely
Huernia spp.	Whole genus	Schedule 6: Protected flora (section 23)	Highly Likely
Liliaceae	All Aloe species	Schedule 4: Protected flora	Confirmed, *Aloe clavirlora, Aloe variegata, Aloe striata*
Mesembryanthemaceae	Whole genus	Schedule 4: Protected flora	Confirmed

Family/Species	Level	Protection	Occurrence in study area
Stapelia spp.	Whole genus	Schedule 6: Protected flora (section 23)	Likely

B-1.5.2 Fauna

Majority of the site has been transformed by existing sugar cane cultivation, dirt roads and construction activity for the Link Road. The remaining natural areas were disturbed and largely infested with exotic vegetation. Although disturbed, faunal habitat in the study area comprised a few small drainage lines, bush clumps / remnant forest patches and a disturbed wetland area dispersed between the cultivated fields, roads, and earthworks area.

Although comprising mostly exotic species the bush clumps represent arboreal habitat providing shelter, feeding and breeding habitat for many faunal species, especially birds. Bird species observed within these areas were typical of forest edge and/or woodland habitat.

Watercourses and wetlands are usually areas of high faunal diversity as the riparian environment and dense vegetation provides abundant cover, feeding and breeding habitat for many species of invertebrates, birds, mammals, reptiles and amphibians. When it is available, surface water provides drinking water for many faunal species while the soft sand in river beds and banks provide perfect burrowing environments for small to medium sized mammals, reptiles and invertebrates. The increase in prey and vegetation attracts a high diversity of birds, as well as terrestrial mammals and reptiles, including predators. Drainage lines and the associated riparian vegetation also tend to be corridors of movement through the landscape for fauna and flora. They are especially important in cultivated or transformed landscapes where most of the natural terrestrial habitat is relatively inhospitable or has been destroyed or transformed.

a) Avifauna

The area is high in avifaunal diversity with approximately 431 bird species occurring within Quarter Degree Grid Cell (QDGC) 2931CA and the region of the study site. Of this total, approximately 40 species (20%) are marine pelagic and it is highly unlikely that they will be found on or near the site. Of the remaining 391 terrestrial species, approximately 376 species (96%) are associated with a forest or woodland / grassland or farmland mosaic (including inland water systems). A total of 66 bird species were observed during the field survey and are listed in Appendix C of the Ecological Assessment, along with their national (Barnes, 2000) and global (IUCN [World Conservation Union] Red List of Threatened Species, 2012) conservation status. Bird species observed on site were a mixture of grassland and woodland species, many associated with riparian habitat.

A lower level of endemism exists in the eastern regions of South Africa, compared to the central and western sections of the country, with only 32 endemic bird species occurring in QDGC 2931CA. Conversely, due to the higher avifaunal diversity present, a larger proportion of species are of conservation concern compared to the central and western regions. A total of 48 bird species occurring in the QDGC are of conservation concern either nationally (Barnes, 2000) or globally (IUCN, 2012) (Appendix D of the Ecological Assessment).

Four bird species endemic to southern Africa and one species of conservation concern (i.e. with a status higher than Least Concern) were confirmed to occur in the area of the study site during the field survey. These included the Near Threatened Woolly-necked Stork (*Ciconia episcopus*) and the Endemic Natal Spurfowl (*Pternistis natalensis*), Southern Tchagra (*Tchagra tchagra*), Southern Boubou (*Laniarius ferrugineus*) and Cape White-eye (*Zosterops capensis*). Additionally, one species of conservation concern and seven species endemic to southern Africa were given a high probability of occurring in the study area due to the presence of suitable breeding and/or foraging habitat, but were not recorded during the field survey (Appendix D of the

Ecological Assessment). Such species included the globally Near Threatened European Roller (*Coracias garrulus*) and the Endemic Fiscal Flycatcher (*Sigelus silens*), Rufous-winged Cisticola (*Cisticola galactotes*), Barratt's Warbler (*Bradypterus barratti*), Cape Grassbird (*Sphenoeacus afer*), Cape Sparrow (*Passer melanurus*), Cape Longclaw (*Macronyx capensis)*, Cape Weaver (*Ploceus capensis*), and Swee Waxbill (*Estrilda melanotis*).

Appropriate habitat, represented mainly by the wetland and riparian areas, existed on site for a further 12 bird species of conservation concern and seven species endemic to southern Africa. However, due to the level of degradation and the disturbance of the surroundings (intensive farming and airport), these species were given a medium probability of occurring in the study area (Appendix D of the Ecological Assessment).

b) Mammals

The region includes a relatively high diversity of mammals with approximately 88 indigenous species expected to occur within QDGC 2931CA according to the IUCN. These species are listed in Appendix E of the Ecological Assessment along with the probability of each species occurring in the study area as well as their national (Friedmann & Daly, 2004; DEAT, 2007) and global (IUCN, 2012) conservation status. Six mammal species were identified on the study site during the field survey by sight or field evidence such as spoor, droppings or burrows (Appendix E of the Ecological Assessment). All species identified have a conservation status of Least Concern nationally and globally. A further nine species were given a high probability of occurring in the study area due to the presence of suitable habitat, one of which is protected by national legislation, namely the Cape Clawless Otter (*Aonyx capensis*). A further 34 species were given a medium probability of occurring on the study site including six species of conservation concern (Appendix E of the Ecological Assessment). Suitable habitat exists on the site for these species however due to the level of degradation and disturbance of the surroundings (intensive farming and airport) they are unlikely to occur there.

c) Herpetofauna

(i) Reptiles

According to Reptile MAP, a continuation of the Southern African Reptile Conservation Assessment (SARCA) (ADU, 2012), 46 reptile species have been confirmed to occur within QDGC 2931CA (Appendix F of the Ecological Assessment). While no reptile species were observed on the study site during the field survey, 16 species were given a high probability of occurring on the site due to the presence of suitable habitat. Although six of these species are endemic to southern Africa, the majority have not had their conservation status adequately evaluated.

(ii) Amphibians

According to Minter et al. (2004), 26 amphibian species have been confirmed to occur within QDGC 2931CA. Three amphibian species were identified during the field survey, while suitable habitat was observed for a further nine species which were given a high probability of occurring on site (Appendix G of the Ecological Assessment). None of these species were of conservation concern. A further six species were given a medium probability of occurring on the study site including two species of conservation concern (Appendix G of the Ecological Assessment). Suitable habitat exists on the site for these species however due to the level of degradation on the site and disturbance of the surroundings (intensive farming and airport) they are unlikely to occur there.

(iii) Lepidoptera (Butterflies)

South Africa is home to about 666 species of butterflies (Woodhall, 2005). Butterflies, like most invertebrates are highly sensitive to environmental change making them more vulnerable to the presence of toxins in the ecosystem. The most significant causes of habitat loss for butterflies include invasive alien vegetation, changing fire regimes, agricultural activities, urbanisation, plantation forestry, increased grazing and road construction (Henning et al, 2009). According to the South African Butterfly Conservation Assessment

(SABCA), 243 butterfly species occur within QDGC 2931CA, one of which is of conservation concern (Appendix F of the Ecological Assessment). However, it is highly unlikely this species will occur within the study area due to lack of suitable habitat.

B-1.6 Ecological Sensitivity

Based on the findings of the ecological assessments, ecologically sensitive habitats or areas of conservation importance were mapped for flora and fauna (Figure 7).

a) Areas of High Sensitivity

Since the natural vegetation in the study area was degraded, no areas were highlighted as highly sensitive.

b) Areas of Medium-High Sensitivity

All drainage lines within the study area were classified as medium-high ecological sensitivity. The highest faunal activity was observed in the riparian areas around drainage lines and such features in the landscape act as corridors for movement for fauna and flora. The degraded wetland system in the western corner of the study site was also classified as medium-high sensitivity since this area has the potential to provide suitable habitat for sensitive faunal and floral species.

c) Areas of Medium Sensitivity

All remaining areas containing natural vegetation were classified as medium ecological sensitivity. Although these areas were degraded and low floral species diversity was recorded at the time of the survey, one plant species of conservation concern was confirmed to occur in this area. These areas were also utilised by faunal species, especially birds.

d) Areas of Low Sensitivity

Areas where natural vegetation no longer existed such as the old and current sugar cane fields, buildings, roads and earthworks were classified as low ecological sensitivity.

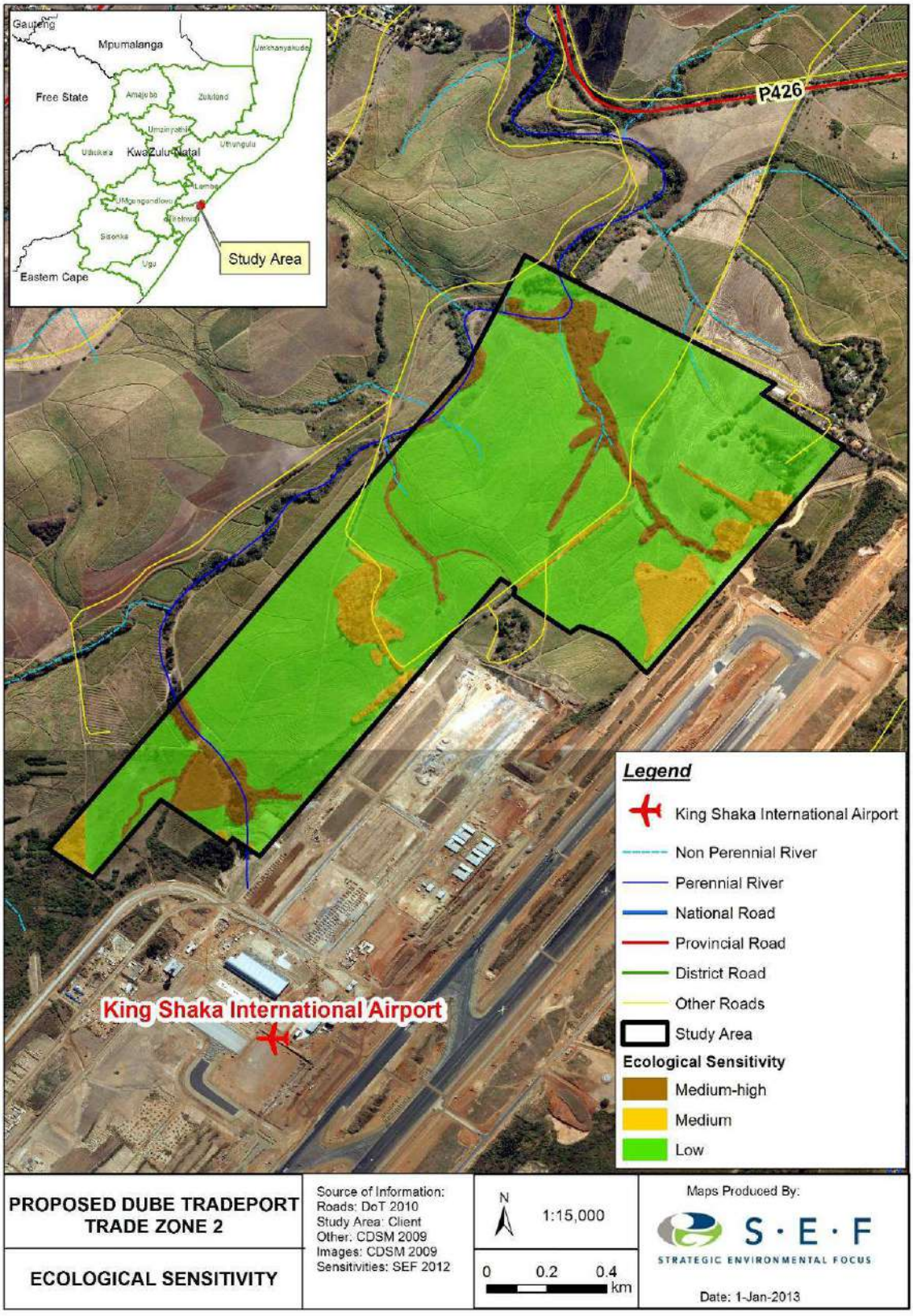

Figure 7: Ecological sensitivity

B-2 SOCIAL ENVIRONMENT

B-2.1 Heritage

As per the National Heritage Resources Act, 1999 (Act No. 25 of 1999) a Heritage Impact Assessment was conducted for the proposed development site. The assessment was conducted by Strategic Environmental Focus (Pty) Ltd in December 2012 (refer to Appendix 6).

The study revealed the presence of a dilapidated building (house ruin) which could be over 60 years. This structure occurs at approximately 29°35'53.01"S and 31°07'05.97"E. This structure is protected by the National Heritage Resources Act, 1999 (Act No. 25 of 1999) and a permit will be required to be applied for, with Amafa, should the building be impacted upon by the proposed development.

Photo 1: A collapsed house (possibly over 60 years)

If it is decided that this house ruin is demolished, a Phase II Built Heritage Study to assess its significance and determine its age, and Permit Application with Amafa will be required, as this structure is protected by the NHRA.

It is therefore recommended, from a heritage point of view that the establishment of the Dube Trade Port Trade Zone 2 proceed, with adherence to the conditions listed in Section 6 of this report.

Construction activities should be limited to the proposed development boundary. If the size of the footprint is increased at a later stage, a heritage specialist should be involved in order to assess how the increase in the size of the footprint will affect heritage resources.

Herrwood occurs adjacent to the site boundary. There are ancestral graves at Herrwood. During the construction phase of the project, the graves at Herrwood must be respected and will be out of bounds to the construction crew. Construction activity must be confined to the site boundary of the TradeZone 2 development and the contractor and Site Manager must ensure that construction crew do not encroach into Herrwood. This management measure is included in the Environmental Management Programme (EMPr).

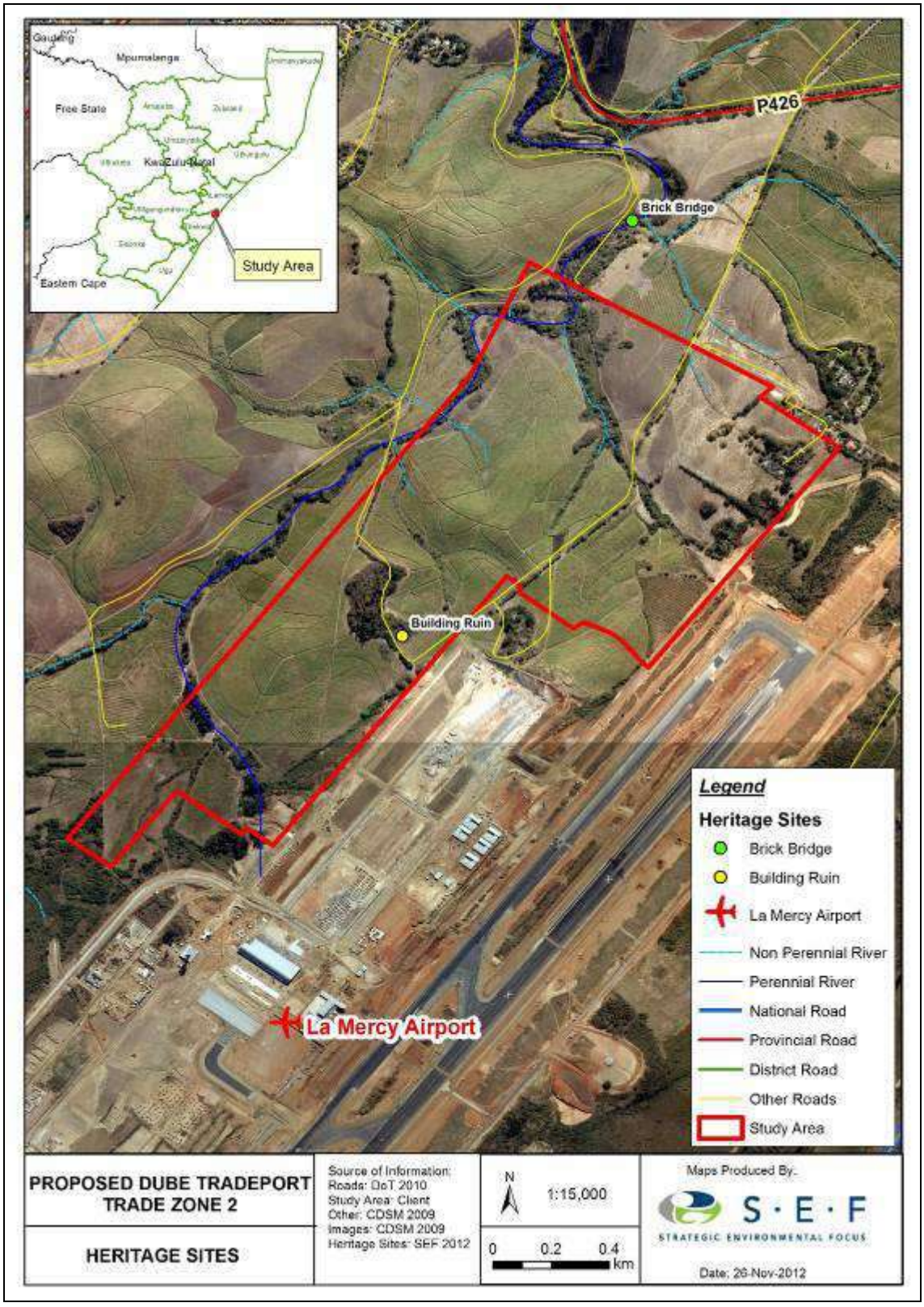

Figure 8: Location of the building ruin on the study site

B-2.2 Visual

The KSIA and DTP Trade Zone 1 are notably extensive features in the landscape and the land uses of the proposed development may blend in or be compatible with these adjacent land uses. There are no residential areas in close proximity to the site and therefore, the proposed development will not be visually obtrusive.

B-2.3 Noise

The site that is earmarked for the proposed development falls within the sensitive noise zones of 55dB for 2010, 2015 and 2035 noise contours of the KSIA. The site is presently impacted by noise generated from aircraft flights.

As mentioned in the Northern Urban Development Corridor (NUDC) for the Tongaat-DTP Local Area Plan (LAP) (2010), the operations of KSIA and DTP have a negative impact on neighbouring land uses due to noise. This is particularly applicable to residential neighbourhoods where the ambient noise exceeds acceptable levels. For planning purposes, the eThekwini Municipality has adopted an 'in-principle' decision to use the noise contours for the 2035 development footprint of the airport as a guideline to directing urban development. Any development within the 55dB DNL (Day Night Average Sound Level)5 contour is considered sensitive to noise (SANS 1010) and must adhere to additional development controls if permitted.

In view of the close proximity of the proposed development to the airport, it is recommended that the design of the buildings within the study area incorporate noise reduction principles to minimize noise impacts on the occupants. Therefore, residential development is not recommended as an alternative for the proposed development. Industrial development and associated aviation-related activities are compatible land-uses that will complement the adjacent KSIA and DTP.

B-2.4 Air Quality

Changes to the ambient air quality in the immediate vicinity of the project can be expected during the construction and operation phases. During construction, this will primarily be a result of land clearance, construction vehicles travelling on exposed surfaces and earthworks in the form of dust generation.

During the operational phase, the nuisance aspect of dust will be minimal, as the area is sparsely populated and people do not reside in close proximity to the site. There will be indirect impacts in the form of increased localised emissions from increased vehicular traffic. Should any of the activities at the proposed light industrial facility generate any noxious gas emissions, the responsible tenant must obtain an Air Emissions Licence (AEL) from the eThekwini Municipality prior to commencement of the operation/activity.

[5] DNL is Day Night Average Sound Level – recognised industry standard to measure average aircraft noise levels over a 24 hour period.

SECTION C: ENVIRONMENTAL IMPACT ASSESSMENT (EIA) PROCESS

C-1 APPROACH TO THE EIA

An Environmental Impact Assessment (EIA) is an effective environmental planning tool. It identifies the environmental impacts of a proposed project and assists in ensuring that a project will be environmentally acceptable and integrated into the surrounding environment in a sustainable way.

The EIA for this project complies with the requirements of the National Environmental Management Act, 1998 (Act 107 of 1998) [NEMA] and the NEMA EIA Regulations, 2010 of the DEA. The guiding principles of an EIA are listed below.

Definition of the term "environment"

The term "environment" is used in the broadest sense in an environmental impact assessment. It covers the physical, biological, social, economic, cultural, historical, institutional and political environments.

C-2 GUIDING PRINCIPLES FOR AN EIA

The EIA must take an open participatory approach throughout. This means that there should be no hidden agendas, no restrictions on the information collected during the process and an open-door policy by the proponent. Technical information must be communicated to stakeholders in a way that is understood by them and that enables them to meaningfully comment on the project.

There should be ongoing consultation with Interested and Affected Parties (I&APs) representing all walks of life. Sufficient time for comment must be allowed. The opportunity for comment should be announced on an on-going basis. There should finally be opportunities for input by specialists and members of the public. Their contributions and issues should be considered when technical specialist studies are conducted and when decisions are made.

The eight guiding principles that govern the entire process of EIA are as follows (see Figure below):

- **Participation:** An appropriate and timely access to the process for all interested parties.
- **Transparency:** All assessment decisions and their basis should be open and accessible.
- **Certainty:** The process and timing of the assessment should be agreed in advanced and followed by all participants.
- **Accountability:** The decision-makers are responsible to all parties for their action and decisions under the assessment process.
- **Credibility:** Assessment is undertaken with professionalism and objectivity.
- **Cost-effectiveness:** The assessment process and its outcomes will ensure environmental protection at the least cost to the society.
- **Flexibility:** The assessment process should be able to adapt to deal efficiently with any proposal and decision making situation.
- **Practicality:** The information and outputs provided by the assessment process are readily usable in decision making and planning.

A S&EIR process is considered as a project management tool for collecting and analysing information on the environmental effects of a project. As such, it is used to:

- Identify potential environmental impacts;
- Examine the significance of environmental implications;
- Assess whether impacts can be mitigated;
- Recommend preventive and corrective mitigating measures;

- Inform decision makers and concerned parties about the environmental implications; and
- Advise whether development should go ahead.

Figure 9: The eight guiding principles for the EIA process

A S&EIR process typically has four phases, as illustrated in the Figure below. The Public Participation process forms an integral part of all four phases and is discussed in greater detail in Section C – 4 of this final Scoping Report.

C-3 S&EIR TECHNICAL PROCESS

This section provides a summary of the technical process that was followed for this S&EIR process.

Figure 10: Flow diagram of the Scoping and EIR process

C-3.1 Pre-application Consultation with the DEA

No pre-consultation meeting was held between SEF and DEA. The EAP conducting the S&EIR process for the applicant, in support of their application for an environmental authorisation, is deemed to have a good understanding of the information requirements of the Department for the proposed development, such that the Department's specific information requirements are deemed to have been met for the scoping phase of this project.

C-3.2 Application for Authorization

The application form informing the Department of the intent to obtain an Environmental Authorisation was submitted to the DEA on 9 May 2012. The project was subsequently registered and DEA issued the project with reference number DEA Ref: 14/12/16/3/3/2/341. Refer to Appendix 4 for the Application for Authorisation Form and the DEA acknowledgement of receipt of the application.

The Final Scoping Report and Plan of Study for the EIR was submitted to the DEA on 27 August 2013. On 8 November 2012, the DEA accepted the Final Scoping Report and Plan of Study for the EIR.

C-3.3 Information Gathering

Early in the EIR process, the technical specialists identified the information that would be required for the impact assessment and the relevant data was obtained. In addition, the specialists sourced available information about the receiving environment from reliable sources, I&APs, previous documented studies in the area and previous EIR Reports.

C-3.4 Specialist Studies

The following specialist studies have been undertaken during the EIR phase:

- Geological and Geo-technical Investigations;
- Ecological Assessment (Flora, Fauna and Avifauna);
- Wetland Delineation and Functional Assessment;
- Phase 1: Cultural Heritage Impact Assessment;
- Agricultural Potential Assessment;
- Floodline Assessment;

- Services Report (civil and electrical); and
- Traffic Impact assessment.

C-4 PUBLIC PARTICIPATION PROCESS

The principles of NEMA govern many aspects of the S&EIR process, including consultation with I&APs. These principles include the provision of sufficient and transparent information to I&APs on an ongoing basis, to allow them to comment; and ensuring the participation of historically disadvantaged individuals, including women, the disabled and the youth.

The principal objective of public participation is thus to inform and enrich decision-making. This is also the key role in the scoping phase of the process.

C-4.1 Identification of Interested and Affected Parties

I&APs representing the following sectors of society have been identified in terms of Regulation 55 of the EIA Regulations R543 of 2010 (see Appendix 5 for a complete preliminary I&AP distribution list):

- Provincial Authorities;
- Local Authorities;
- Ward Councillors;
- Parastatal/ Service Providers;
- Non-governmental Organisations;
- Local forums/ unions; and
- Adjacent Landowners.

C-4.2 Public Announcement of the Project

The Scoping process (Phase 1 of the Public Participation Process) was announced as follows:

- Publication of a media advertisement in English, in the Coastal Weekly on 25 May 2012 (see Appendix 5);
- Two English and two Zulu site notices were erected at visible locations close to the site on 28 May 2012 as follows:
  - At the entrance to the site in close proximity to Ushukela Highway; and
  - On a fence at the entrance to the Dube Trade Port Cargo Terminal.
- Refer to Appendix 5 for the English Site Notice Text and Appendix 5 for the Zulu Site Notice Text. Photographic evidence of the site notices is included in Appendix 5 and
- Distribution of notification letters, comment and registration sheet by fax/post/email to all organs of state, service providers, Non-Governmental Organizations, Ward Councillors and committees on 28 May 2012 (see Appendix 5 for reference to the information package consisting of notification letters, locality map and registration and comment sheet).

C-4.3 Public Meeting

A Public Meeting was held on Wednesday, 20 June 2012 at the Tongaat Town Hall to present the findings of the Draft Scoping Report. Notification of the public meeting and review of the Draft Scoping Report was advertised in the Coastal Weekly on 14 June 2012. Proof of publication of the advert is in Appendix 5.

In addition, registered I&APs were invited via email, post and fax to attend the public meeting and were also notified of the review dates and availability of the Draft Scoping Report for public comment.

There were no members of the public nor registered I&APs at this meeting. Please see attendance registered attached in Appendix 5.

C-4.4 Draft Scoping Report

All the issues raised were captured in the Draft Scoping Report. A period of 40 days was made available for public comment on the Draft Scoping Report and PoS for EIR. The availability of the Draft Scoping Report was announced as follows:

- Personal letters to all the registered I&APs on the distribution list (refer to Appendix 5 for example of the letter that was sent out);
- An advertisement announcing the availability of the Draft Scoping Report and the public meeting was published in the Coastal Weekly on 14 June 2012.
- The hard copies of the report was posted or hand delivered to all 'organs of state' which included the following:
    - Amafa KwaZulu-Natal;
    - National Department of Agriculture, Forestry and Fisheries (DAFF): Land Use and Soil Management;
    - Provincial DAFF (Forestry Directorate);
    - Provincial Department of Agriculture and Environmental Affairs (KZN DAEA): Land Use and Soil Management;
    - Department of Water Affairs (Water Quality Section);
    - Ezemvelo KZN Wildlife (EKZNW); and
    - eThekwini Municipality.

The Draft Scoping Report and PoS for EIR were distributed for public comment from 14 June 2012 to 26 July 2012 on the SEF website: www.sefsa.co.za and at the Tongaat Library, 1 Victoria Lane, Tongaat.

The I&APs were encouraged to send through their comments via post, e-mail, fax or by contacting the SEF office. Refer to the Comments and Response Report (see Appendix 5) for the comments that were raised upon public review of the Draft Scoping Report and the responses thereof. The actual comments and responses are provided in Appendix 5.

C-4.5 Final Scoping Report

The Final Scoping Report incorporated comments received from the registered I&APs as well as 'organs of state' upon public review of the Draft Scoping Report. The Final Scoping Report was available to registered I&APs for comment for 21 days i.e. from 27 August to 17 September 2012 at the Tongaat Public Library and at the SEF website: www.sefsa.co.za. Notification letters regarding the availability of the Final Scoping Report for public review is provided in Appendix 5. Refer to the Comments and Responses Report for comments that were raised during public review of the Final Scoping Report.

C-4.6 Draft Environmental Impact Report

The findings of the Impact Assessment Phase are presented in this Draft EIR and EMPr (including the specialist studies conducted) and is available for public review and comment.

A period of **40 calendar days (11 December 2013 – 11 February 2014**) has been provided to the **State Departments and registered I&APs** for the review and commenting phase of the Draft Environmental Impact Report (EIR). The availability of the Draft EIR will be announced by means of personal letters to all the registered I&APs on the distribution list.

In addition, the Draft EIR will be distributed for comment as follows:

- Left in a public venue (Tongaat Public Library);
- Hand-delivered/ couriered to the relevant authorities; and
- Posted on SEF's website at http://www.sefsa.co.za.

All the comments and concerns raised will been captured in a CRR. I&APs will be sent letters acknowledging their contributions.

C-4.7 Final Environmental Impact Report

The EIR will be updated with comments and/or concerns raised by I&APs. The CRR will be attached to the Final EIR. The Final EIR will be submitted to the DEA and registered I&APs simultaneously for review. Registered I&APs will advised to submit any additional comments on the Final EIR directly to the DEA for consideration towards an Environmental Authorisation.

SECTION D: ASSESSMENT CRITERIA

D-1 IMPACT IDENTIFICATION AND ASSESSMENT

The assessment criteria must clearly identify the environmental impacts of the proposed development. The environmental impacts identified will be quantified and the significance of the impacts assessed according to the criteria set out below. The EAP must make a clear statement, identifying the environmental impacts of the construction, operation and management of the proposed development. As far as possible, the EAP must quantify the suite of potential environmental impacts identified in the study and assess the significance of the impacts according to the criteria set out below. Each impact will be assessed and rated. The assessment of the data must, where possible, be based on accepted scientific techniques, failing which the specialist is to make judgements based on his/ her professional expertise and experience.

D-1.1.1 Assessment Procedure: Proposed Impact Assessment Methodology

For the purpose of assessing impacts of the proposed development, during the EIR phase, the project will be divided into two phases from which impacting activities can be identified, namely:

Construction Phase:	All the construction related activities on site, until the contractor leaves the site.
Operational Phase:	All activities, including the operation and maintenance of the proposed mine.

The activities arising from each of these phases will be included in the impact assessment tables. This is to identify activities that require certain environmental management actions to mitigate the impacts arising from them. The assessment of the impacts will be conducted according to a synthesis of criteria required by the integrated environmental management procedure.

Extent The physical and spatial scale of the impact.	Footprint	The impacted area extends only as far as the activity, such as footprint occurring within the total site area.
	Site	The impact could affect the whole, or a significant portion of the site.
	Regional	The impact could affect the area including the neighbouring farms, the transport routes and the adjoining towns.
	National	The impact could have an effect that expands throughout the country (South Africa).
	International	Where the impact has international ramifications that extend beyond the boundaries of South Africa.

Duration The lifetime of the impact, that is measured in relation to the lifetime of the proposed development.	Short Term	The impact will either disappear with mitigation or will be mitigated through a natural process in a period shorter than that of the construction phase.
	Short-Medium Term	The impact will be relevant through to the end of a construction phase.
	Medium Term	The impact will last up to the end of the development phases, where after it will be entirely negated.
	Long Term	The impact will continue or last for the entire operational lifetime of the development, but will be mitigated by direct human action or by natural processes thereafter.
	Permanent	This is the only class of impact, which will be non-transitory. Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient.
Intensity Is the impact destructive or benign, does it destroy the impacted environment, alters its functioning, or slightly alter the environment itself?	Low	The impact alters the affected environment in such a way that the natural processes or functions are not affected.
	Medium	The affected environment is altered, but functions and processes continue, albeit in a modified way.
	High	Function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases.
Probability The likelihood of the impacts actually occurring. The impact may occur for any length of time during the life cycle of the activity, and not at any given time.	Improbable	The possibility of the impact occurring is none, due either to the circumstances, design or experience. The chance of this impact occurring is zero (0%).
	Possible	The possibility of the impact occurring is very low, due either to the circumstances, design or experience. The chances of this impact occurring is defined as 25%.
	Likely	There is a possibility that the impact will occur to the extent that provisions must therefore be made. The chances of this impact occurring is defined as 50%.
	Highly Likely	It is most likely that the impacts will occur at some stage of the development. Plans must be drawn up before carrying out the activity. The chances of this impact occurring is defined as 75%.
	Definite	The impact will take place regardless of any prevention plans, and only mitigation actions or contingency plans to contain the effect can be relied on. The chance of this impact occurring is defined as 100%.

Mitigation – The impacts that are generated by the development can be minimised if measures are implemented in order to reduce the impacts. These measures ensure that the development considers the environment and the predicted impacts in order to minimise impacts and achieve sustainable development.

Determination of Significance – Without Mitigation – Significance is determined through a synthesis of impact characteristics as described in the above paragraphs. It provides an indication of the importance of the impact in terms of both tangible and intangible characteristics. The significance of the impact "without mitigation" is the prime determinant of the nature and degree of mitigation required. Where the impact is positive, significance is noted as "positive". Significance will be rated on the following scale:

No significance: The impact is not substantial and does not require any mitigation action;
Low: The impact is of little importance, but may require limited mitigation;
Medium: The impact is of importance and is therefore considered to have a negative impact. Mitigation is required to reduce the negative impacts to acceptable levels; and
High: The impact is of major importance. Failure to mitigate, with the objective of reducing the impact to acceptable levels, could render the entire development option or entire project proposal unacceptable. Mitigation is therefore essential.

Determination of Significance – With Mitigation – Determination of significance refers to the foreseeable significance of the impact after the successful implementation of the necessary mitigation measures. Significance with mitigation will be rated on the following scale:

No significance: The impact will be mitigated to the point where it is regarded as insubstantial; Low: The impact will be mitigated to the point where it is of limited importance;
Low to medium: The impact is of importance, however, through the implementation of the correct mitigation measures such potential impacts can be reduced to acceptable levels;
Medium: Notwithstanding the successful implementation of the mitigation measures, to reduce the negative impacts to acceptable levels, the negative impact will remain of significance. However, taken within the overall context of the project, the persistent impact does not constitute a fatal flaw;
Medium to high: The impact is of major importance but through the implementation of the correct mitigation measures, the negative impacts will be reduced to acceptable levels; and
High: The impact is of major importance. Mitigation of the impact is not possible on a cost-effective basis. The impact is regarded as high importance and taken within the overall context of the project, is regarded as a fatal flaw. An impact regarded as high significance, after mitigation could render the entire development option or entire project proposal unacceptable.

Assessment Weighting – Each aspect within an impact description was assigned a series of quantitative criteria. Such criteria are likely to differ during the different stages of the project's life cycle. In order to establish a defined base upon which it becomes feasible to make an informed decision, it will be necessary to weigh and rank all the identified criteria.

Ranking, Weighting and Scaling – For each impact under scrutiny, a scaled weighting factor will be attached to each respective impact. The purpose of assigning such weightings serve to highlight those aspects considered the most critical to the various stakeholders and ensure that each specialist's element of bias is taken into account. The weighting factor also provides a means whereby the impact assessor can successfully deal with the complexities that exist between the different impacts and associated aspect criteria.

Simply, such a weighting factor is indicative of the importance of the impact in terms of the potential effect that it could have on the surrounding environment. Therefore, the aspects considered to have a relatively high value will score a relatively higher weighting than that which is of lower importance (Figure below: Weighting description).

Extent	Duration	Intensity	Probability	Weighting Factor (WF)	Significance Rating (SR)	Mitigation Efficiency (ME)	Significance Following Mitigation (SFM)
Footprint 1	Short term 1	Low 1	Probable 1	Low 1	Low 0-19	High 0,2	Low 0-19
Site 2	Short to medium 2		Possible 2	Low to medium 2	Low to medium 20-39	Medium to high 0,4	Low to medium 20-39
Regional 3	Medium term 3	Medium 3	Likely 3	Medium 3	Medium 40-59	Medium 0,6	Medium 40-59
National 4	Long term 4		Highly Likely 4	Medium to high 4	Medium to high 60-79	Low to medium 0,8	Medium to high 60-79
International 5	Permanent 5	High 5	Definite 5	High 5	High 80-100	Low 1,0	High 80-100

Figure 11: Description of bio-physical assessment parameters with its respective weighting

Identifying the Potential Impacts Without Mitigation Measures (WOM) – Following the assignment of the necessary weights to the respective aspects, criteria are summed and multiplied by their assigned weightings, resulting in a value for each impact (prior to the implementation of mitigation measures).

Equation 1: Significance Rating (WOM) = (Extent + Intensity + Duration + Probability) x Weighting Factor

Identifying the Potential Impacts With Mitigation Measures (WM) – In order to gain a comprehensive understanding of the overall significance of the impact, after implementation of the mitigation measures, it will be necessary to re-evaluate the impact.

Mitigation Efficiency (ME) – The most effective means of deriving a quantitative value of mitigated impacts is to assign each significance rating value (WOM) a mitigation effectiveness (ME) rating. The allocation of such a rating is a measure of the efficiency and effectiveness, as identified through professional experience and empirical evidence of how effectively the proposed mitigation measures will manage the impact.

Thus, the lower the assigned value the greater the effectiveness of the proposed mitigation measures and subsequently, the lower the impacts with mitigation.

Equation 2: Significance Rating (WM) = Significance Rating (WOM) x Mitigation Efficiency
Or
WM = WOM x ME

Significance Following Mitigation (SFM) – The significance of the impact after the mitigation measures are taken into consideration. The efficiency of the mitigation measure determines the significance of the impact. The level of impact will, therefore, be seen in its entirety with all considerations taken into account.

D-1.1.2 Integration of Specialist's Input

In order to maintain consistency in the impact assessment, it is suggested that all potential impacts to the environment (or component of the environment under review) should be listed in a table similar to the example shown below (more than one table will be required if impacts require assessment at more than one scale). The assessment parameters used in the table should be applied to all of the impacts and a brief descriptive review of the impacts and their significance will then be provided in the text of the specialist reports and consequently in the EIR. The implications of applying mitigation are reviewed in Section D-1.1.3 below.

Table 13: Example of an Impact Table

Impact source(s)			Status	-
Nature of impact				
Reversibility of impact				
Degree of irreplaceable loss of resource				
Affected stakeholders				
Magnitude	*Extent*			
	Intensity			
	Duration			
	Probability			
Significance	*Without mitigation*			H
	With mitigation			L
Significance Following Mitigation (SFM)				

D-1.1.3 Mitigation Measures

Mitigation measures will be recommended in order to enhance benefits and minimise negative impacts and they will address the following:

- *Mitigation objectives:* what level of mitigation must be aimed at: For each identified impact, the specialist must provide mitigation objectives (tolerance limits) which would result in a measurable reduction in impact. Where limited knowledge or expertise exists on such tolerance limits, the specialist must make an "educated guess" based on his/ her professional experience;
- *Recommended mitigation measures:* For each impact the specialist must recommend practicable mitigation actions that can measurably affect the significance rating. The specialist must also identify management actions, which could enhance the condition of the environment. Where no mitigation is considered feasible, this must be stated and reasons provided;
- *Effectiveness of mitigation measures:* The specialist must provide quantifiable standards (performance criteria) for reviewing or tracking the effectiveness of the proposed mitigation actions, where possible; and
- *Recommended monitoring and evaluation programme:* The specialist is required to recommend an appropriate monitoring and review programme, which can track the efficacy of the mitigation objectives. Each environmental impact is to be assessed before and after mitigation measures have been implemented. The management objectives, design standards, etc., which, if achieved, can eliminate, minimise or enhance potential impacts or benefits. National standards or criteria are examples, which can be stated as mitigation objectives.

Once the above objectives have been stated, feasible management actions, which can be applied as mitigation, must be provided. A duplicate column on the impact assessment tables described above will indicate how the application of the proposed mitigation or management actions has reduced the impact. If the proposed mitigation is to be of any consequence, it should result in a measurable reduction in impacts (or, where relevant, a measurable benefit).

D-1.2 Approach to the Assessment of Cumulative Impacts

Cumulative impacts can arise from one or more activities. A cumulative impact may result in an additive impact i.e. where it adds to the impact which is caused by other similar impacts or an interactive impact i.e. where a cumulative impact is caused by different impacts that combine to form a new kind of impact. Interactive impacts may be either countervailing (the net adverse cumulative impact is less than the sum of the individual impacts) or synergistic (the net adverse cumulative impact is greater than the sum of the individual impacts).

Possible cumulative impacts of the project are evaluated in Section 6 of the EIR. In addition, various other cumulative impacts e.g. other external impacts that could arise from the project will be further investigated in the EIR phase of the project.

The assessment of cumulative impacts on a study area is complex; especially if many of the impacts occur on a much wider scale than the site being assessed and evaluated. It is often difficult to determine at which point the accumulation of many small impacts reaches the point of an undesired or unintended cumulative impact that should be avoided or mitigated. There are often factors which are uncertain when potential cumulative impacts are identified.

D-1.2.1 Steps in Assessing Cumulative Impacts

The assessment of cumulative impacts will not be done separately from the assessment of other impacts. Cumulative impacts however, tend to have different time and space dimensions and therefore require specific steps.

Three (3) general steps, which are discussed below, will be recommended to ensure the proper assessment of cumulative impacts.

D-1.2.2 Determining the Extent of Cumulative Impacts

To initiate the process of assessing cumulative impacts, it is necessary to determine what the extent of potential cumulative impacts will be. This will be done by adopting the following approach:

- Identify potentially significant cumulative impacts associated with the proposed activity;
- Establish the geographic scope of the assessment;
- Identify other activities affecting the environmental resources of the area; and
- Define the goals of the assessment.

D-1.2.3 Describing the Affected Environment

The following approach is suggested for the compilation of a description of the environment:

- Characterise the identified external environmental resources in terms of their response to change and capacity to withstand stress;
- Characterise the stresses affecting these environmental resources and their relation to regulatory thresholds; and
- Define a baseline condition that provides a measuring point for the environmental resources that will be impacted on.

D-1.2.4 Assessment of Cumulative Impacts

The general methodology which is used for the assessment of cumulative impacts should be coherent and should comprise of the following:

- An identification of the important cause-and-impact relationships between proposed activity and the environmental resources;
- A determination of the magnitude and significance of cumulative impacts; and
- The modification, or addition, of alternatives to avoid, minimize or mitigate significant cumulative impacts.

SECTION E: ALTERNATIVES

E-1 IDENTIFICATION OF ALTERNATIVES

The EIA procedures and regulations stipulate that the environmental investigation needs to consider feasible alternatives for any proposed development. Therefore, a number of possible proposals or alternatives for accomplishing the same objectives should be identified and investigated. During the EIR phase of the project, the identified alternatives will be assessed, in terms of environmental acceptability as well as socio-economic feasibility. To define the term alternatives as per Government Notice No. 543 of the NEMA EIA Regulations 2010 means:

"…in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to:

(a) The property on which or location where it is proposed to undertake the activity;
(b) The type of activity to be undertaken;
(c) The design or layout of the activity;
(d) The technology to be used in the activity;
(e) The operational aspects of the activity; and
(f) The option of not implementing the activity."

The alternatives below will be further investigated during the EIR phase of the project:

E-1.1 Site/ Location Alternatives

The developer owns the site which is strategically located and in close proximity to the Phase 1 of Dube Trade Port TradeZone and the KSIA. The development of the site would therefore be compatible with the adjacent land uses.

E-1.2 Land Use Alternatives

Alternative 1: The Preferred Alternative is to develop the ~160ha site into light industrial area, General Aviation and airside/cargo terminal to complement the existing adjacent infrastructure constructed during the Phase 1 KSIA/DTP development, including the MRO and Link Road currently under construction The remaining area on site would accommodate service roads and supporting services infrastructure.

Alternative 2: would make allowance for only one land use on the entire site. As such, instead of the proposed development being divided to accommodate open spaces, various tenant specifications and service roads; the entire site would be developed for heavy industries only.

Alternative 3: would make allowance for a layout that would accommodate both light industrial and residential use within TradeZone 2.

E-1.3 Development Layout Alternatives

Alternative 1: Developer's Preferred Layout

This would entail the total infilling of the wetlands and drainage lines on the site to cater for a maximum developable area (refer to Appendix 3).

Alternative 2: Environmentally Preferred Layout

This would entail the implementation of a buffer width of 30m from the wetlands and drainage lines on site to maintain the ecological processes associated with the water resources on site and minimise the negative

impacts on the downstream hydrological systems. This layout would entail a reduced development footprint that will render to the development unfeasible for the proposed land uses i.e. General Aviation, Residential area for the air force, that are required to integrate with Phase 1 of KSIA/DTP and the greater Master Plan due to space limitations (Refer to Appendix 3).

E-1.4 No Development Alternative

The 'no-go' or 'do nothing' alternative would be applicable if the proposed development is not approved by the DEA and the status quo of the site will remain. This option assumes that a conservative approach would ensure that the environment is not impacted upon any more than is currently the case. It is important to state that this assessment is informed by the current condition of the area. Should the proposed development not be implemented, the study area will not be affected by any construction-related or operational phase impacts. Therefore, the present state of the biophysical, social and economic environment will remain, unaffected.

The site would remain undeveloped and commercial sugar cane farming would continue. The proposed general aviation associated Maintenance Repair Overhaul (MRO) Facility and the new link road between the Cargo Terminal and uShukela Drive (formerly Watson Highway) would however, be underutilized. In addition to servicing the needs of the Cargo Terminal and Trade Zone area, the link road has been designed to accommodate additional traffic from surrounding areas earmarked for development. Against this background, this alternative would have huge implication for the infrastructure investment already made in the area. The no-go alternative will be investigated at the EIA phase.

The site would remain undeveloped and commercial sugar cane farming would continue. The proposed general aviation associated Maintenance Repair Overhaul (MRO) facility and the new link road between the Cargo Terminal and uShukela Drive (formerly Watson Highway) would however, be underutilized. In addition to servicing the needs of the Cargo Terminal and Trade Zone area, the link road has been designed to accommodate additional traffic from surrounding areas earmarked for development. Against this background, this alternative would have huge implication for the infrastructure investment already made in the area.

The airport is anticipated to provide opportunities for new trade, a logistics gateway, additional cargo freight, direct international flights and an increased number of passengers in the long-term. Should the Trade Zone 2 development not take place, there would be no infrastructure to support the expansion of the airport to meet its provincial goals of growth in the economy. The investment made in Phase 1 of the KSIA/DTP development will not be fully utilized and supported. The province would stagnate in growth of the airport due to the lack of adequate infrastructure.

Failure to construct the Trade Zone 2 development will not unlock opportunities for economic and employment opportunities in the Greater La Mercy area and will not contribute to the Dube Aerotropolis[6] development plans.

The DTP has been identified as a key development node in the north, and this is evident in the eThekwini Municipality's IDP, as well as the northern spatial development plan, and the Tongaat/DTP LAP. In the absence of the Trade Zone 2 development, there would be stifled growth, not only in the northern region of the Municipality but also in the Southern African region, since the airport's international status will be undermined.

[6] KSIA is a core piece of infrastructure with access to sea, road and rail linkages, within one of Southern Africa's strongest regional economies.
DTP development strategy will guide the development of the entire Airport City and create significant opportunities for all businesses in surrounding area (www.thdev.co.za/developments/aerotropolis/overview).
An Aerotropolis is a new layout of urban form comprising of aviation intensive businesses and related enterprises extending up to 25 kilometres outward from major airports (http//:en.wikipedia.org/wiki/Aerotropolis).

In the absence of the proposed TradeZone 2 development, there would be no need for additional services infrastructure such as the proposed 2.2Ml reservoir to provide water to the proposed development. In addition, there would not be the need for the construction of additional bulk sewer pipelines to the Tongaat Waste Water Treatment Works (WWTW) to cater for the increased demand in sewerage requirements. The present status quo in terms of stormwater run-off would prevail and there would be no need for the construction of attenuation ponds. There would not be any pressure on the eThekwini Municipality to collect waste that would have been generated at the Trade Zone 2 development, if it were constructed and became fully operational.

The anticipated road upgrades that are envisaged by Traffic Engineer would not be required, should the Trade Zone 2 development not go-ahead.

There would not be any destruction of additional habitats, as there would not be any infilling of wetlands and drainage lines associated with the Trade Zone 2 development site. With the implementation of on-site rehabilitation measures to re-instate the wetlands and drainage lines, there would be increased biodiversity on the site. There would be potential biodiversity benefits from secured wetland offsets and rehabilitation of the Hlawe River as a result of the Hlawe River Pipeline Project.

E-2 COMPARATIVE ASSESSMENT

Advantages are marked with a (√) while disadvantages are marked with (**X**) under the subsequent headings.

E-2.1 Layout Alternatives

Layout Alternative 1 (Developer's Preferred Layout) – Infilling of the watercourse on site	Layout Alternative 2 (Environmentally preferred layout) – 30m buffer around watercourses
X The total infilling of the wetlands and drainage lines on site will lead to a loss of wetlands on site. This is in contravention to the KSIA Appeal Decision that wetlands on site must be rehabilitated and maintained. **X** The infilling of the wetlands and drainage lines on site will lead to a cumulative net loss of wetlands within the KSIA/DTP Precinct through damage, destruction and pollution of the water resources. **X** There will be a loss of hydrological function caused by altered flow patterns, increase in hard surfaces within the Tongati River Catchment, and negative impacts on the downstream wetland and riparian systems through change in flow due to decreased sub-surface flow and an increase in flood peaks. **X** The destruction of the drainage lines and wetland areas will not support floral and faunal movement within the landscape, thereby impacting on localised biodiversity. The decline in habitat availability and species composition and diversity could result in a decline in the local aquatic biota of the Hlawe River and cause a further decline of the aquatic biota in the Tongati River Catchment as a result of declining water quality. **X** There could be a decline in water quality downstream of the site. A further decline in surface water quality in terms of both sedimentation and pollutants can be expected.	√ The adoption of a 30m buffer around the wetlands will ensure that construction and operational activities are restricted to reduce the impact of adjacent land uses on the ecologically sensitive areas of the site. √ The rehabilitation of the disturbed drainage lines and wetlands on site will provide a suitable habitat for the sensitive floral and faunal species. √ Removal of alien plant species within the wetlands and the 30m buffer will improve the ecological integrity of the site. √ The 30m buffer will promote the continuity of ecological corridors. **X** The development footprint will be greatly reduced if the wetlands and the 30m buffer are implemented. While protecting the wetlands, there would be insufficient space for development of the TradeZone 2 landuses such as general aviation, light industrial and airside/cargo terminal. Therefore, there would be no impetus for the expansion of the KSIA/DTP, as there would not be integration between TradeZone 1 and 2.

X Increased erosion risks due to increased flood peaks and concentrated surface water runoff. X Increase in alien and invasive plant species on-site and downstream. √ The adoption of the wetland offset could achieve the no-net-loss functional area target, as well as provide leeway for any potential risk of failure of certain interventions. √ Mitigation through the rehabilitation of wetlands at the candidate wetland offset site north of the study area is proposed by the developer. √ Successful rehabilitation of the wetlands offsite could ecologically counterbalance the wetlands removed as a result of the proposed development. √ Rehabilitation of the wetlands within the candidate offset site may potentially yield a gain of 49.4ha-eq, this after a conservative estimate of the post-rehabilitation ecological state of the candidate wetlands. √ The candidate site is considered appropriate and suitable for achieving both the wetland functioning target offset and the biodiversity target offset for the proposed development.	

E-2.2 Land Use Alternatives

Alternative 1	**Alternative 2**	**Alternative 3**
Light Industrial Area comprising aviation-related industries	**Only one land use- heavy industries**	**Light industry and residential land uses**
√ This is in line with the local policies (*Draft NSDP*) for development of the DTP area, for land uses such as logistics, business, industry and service opportunities for the region and surrounding local areas. √ Cargo terminal, light industrial and aviation-related land-uses will complement the existing adjacent infrastructure constructed during the Phase 1 KSIA/DTP development, including the MRO and Link Road currently under construction. √ The proposed land uses will utilise and mutually support the international/national logistics infrastructure of Phase 1.	X The Tongaat-DTP LAP: NUDC encourages mixed-use development to enforce the new airport node as an internationally competitive 'Aerotropolis.' X According to the Draft NSDP, non-noxious industry that accommodates manufacturing are recommended for the DTP/KSIA precinct.	X The site is located within the noise contours for the 2035 development footprint of the airport and subject to noise levels exceeding of 55dB DNL (*Day Night Average Sound Level*). Permanent residential development would be impacted by noise of the aircrafts. √ For the light industrial land uses, mitigation measures that incorporate noise reduction principles in the design of the buildings within the study area are recommended. X The Tongaat-DTP LAP: NUDC encourages mixed-use development to enforce the new airport node as an internationally competitive 'Aerotropolis.'

SECTION F: ASSESSMENT OF IMPACTS

F-1 IDENTIFIED IMPACTS

The following issues were identified in the Plan of Study and were investigated as assessed for the proposed development, should the developer's preferred layout alternative be approved (as discussed in Section E above):

Biophysical Impacts

- Potential impacts on surface water resources that occur in close proximity (various non-perennial tributaries traverse the site);
- Potential impacts of increased surface water run-off (viz. increased soil erosion) associated with the establishment of hard surfaces and vegetation clearing (mainly during the construction phase);
- Potential impacts on ground- and surface-water quality, and soils due to hydrocarbon spillages from vehicles during the construction phase of the development;
- Loss of wetland ecosystem and habitat through infill;
- Destruction of existing flora within the study area; and
- Faunal displacement, mainly during the construction phase of the project.

Socio-Economic Impacts

- Increased dust and noise generation during the construction phase;
- Change in the visual character of the area;
- Impact on loss of agricultural land;
- Potential impacts on heritage resources;
- Impacts on localised traffic; and
- Job creation during the construction and operational phases of the proposed project.

F-2 IDENTIFIED CUMULATIVE IMPACTS

Cumulative impacts, as illustrated below, occur as a result from the combined effect of incremental changes caused by other activities together with the particular project. In other words, several developments with insignificant impacts individually may, when viewed together, have a significant cumulative adverse impact on the environment (see Figure below).

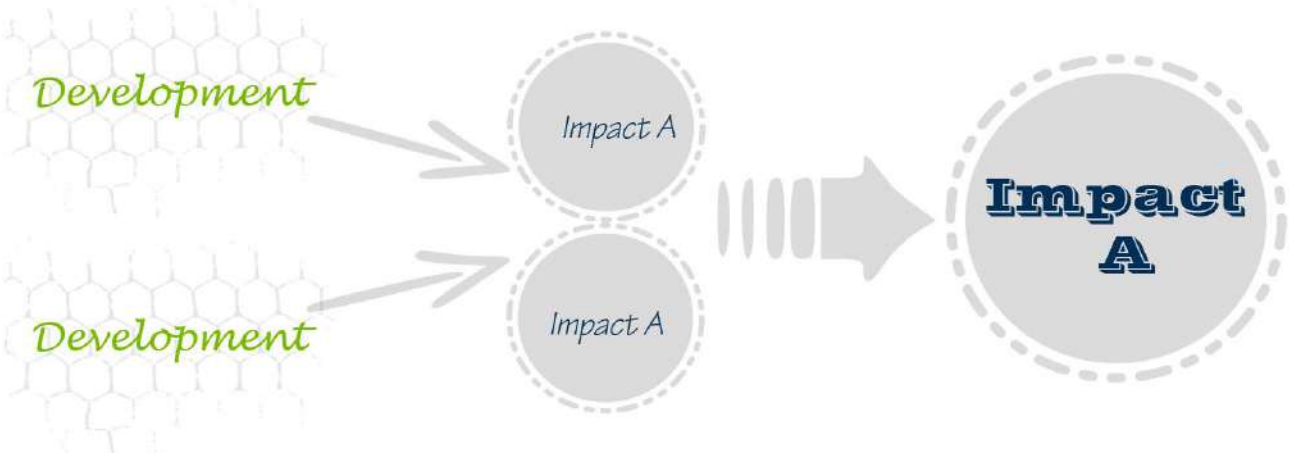

Figure 12: The identification of Cumulative Impacts

The following cumulative impacts have been identified in terms of the proposed development and warrant

further investigation during the assessment phase:

- Increased loss of viable and high potential agricultural land;
- Economic impact of the proposed development;
- Cumulative impact of the proposed development and other developments within the KSIA/DTP Precinct;
- Increased traffic associated with additional road users; and
- Cumulative loss of wetlands on a regional and local level.

F-3 IMPACT ASSESSMENT: CONSTRUCTION PHASE

F-3.1 Biophysical Environment

F-3.1.1 Soil erosion and silting of the wetlands, riparian areas and drainage lines

Source and nature of the impact

By clearing the vegetation for preparing the site for construction and the introducing of hard surfaces, such as the construction of the internal roads, laydown areas and contractor's camps, the stormwater run-off from the site will increase in volume and velocity. This may lead to an increased amount of soil erosion resulting in increased volumes of silt entering the wetlands and watercourse system which could impact on functionality. Rainfall and inadequate drainage systems could lead to erosion gullies forming resulting in land degradation and sedimentation of rivers. In addition, indigenous vegetation communities are unlikely to colonise eroded soils successfully and seeds from proximate alien invasive trees can spread easily into these eroded soil.

Table 14: Soil erosion and silting of the wetland, riparian areas and drainage lines

Impact source(s)	Increased surface area of hard surfaces as a result of construction activities and vehicles		Status	-
Nature of impact	Increased soil erosion and silting of the wetlands, riparian areas and drainage lines			
Reversibility of impact	The impact is reversible through the implementation of adequate stormwater management measures			
Degree of irreplaceable loss of resource	Medium			
Affected stakeholders	Surrounding and downstream land owners			
Magnitude	*Extent*	Regional -3		
	Intensity	High – 5		
	Duration	Medium Term – 3		
	Probability	Highly Likely - 4		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (3+5+3+4) x 4 = 60 Medium to High		M - H
	With mitigation	*WOM x ME = WM* 60 x 0.4 =24 Low - Medium		L - M

Mitigation measures

- An ecologically-sound stormwater management plan must be implemented during construction and appropriate water diversion systems put in place.
- The general level of management required is that of controlling all runoff emanating from such a site in excess of that which would have occurred if the site was in its natural or original state. Such stormwater management may well be the provision of soak pits, structures such as attenuation ponds or tanks (with controlled outlets where necessary), all to ensure that the rate of runoff is reduced to pre-development states and that runoff is not concentrated onto adjacent neighbouring sites or other infrastructure, be it road drainage or valley lines, streams, etc
- Erosion must not be allowed to develop on a large scale before effecting repairs.
- Appropriate mitigation measures (in consultation with the ECO) must be implemented at areas susceptible to erosion (either by wind or rain) to decrease and/or cease erosion.
- Existing roads and tracks must be used where feasible, rather than creating new routes through vegetated areas.
- Vegetation and soil must be retained in position for as long as possible, and removed immediately ahead of construction / earthworks in that area (DWAF, 2005).
- Runoff from roads must be managed to avoid erosion and pollution problems.

- During the construction and operational phases, measures must be put in place to control the flow of surface water so that it does not impact on the vegetation, i.e., energy dissipaters and canal flow designs must be used to prevent scouring and erosion.
- Stormwater management must be implemented into the construction of internal/access roads such as culverts over the riparian and drainage line crossings. Routes through drainage lines and riparian zones must be avoided wherever possible. Where access through drainage lines and riparian zones is unavoidable, only one road is permitted, constructed perpendicular to the drainage line.
- All areas susceptible to erosion must be protected and ensure that there is no undue soil erosion resultant from activities within and adjacent to the construction camp and work areas.
- Areas exposed to erosion due to construction should be vegetated with species naturally occurring in the area.
- Surface water or stormwater must not be allowed to concentrate, or flow down cut or fill slopes without erosion protection measures being in place.
- Erosion berms should be installed to prevent gully formation and siltation of the drainage lines/watercourse. The following points should serve to guide the placement of erosion berms:
    - Where the track has a slope of less than 2%, berms should be installed every 50m.
    - Where the track slopes between 2% and 10%, berms should be installed every 25m.
    - Where the track slopes between 10% and 15%, berms should be installed every 20m.
    - Where the track has a slope greater than 15%, berms should be installed every 10m.
    - Vegetation clearing should be kept to a minimum and phased where practical.
- Sheet run-off from paved surfaces and internal/access roads needs to be curtailed.
- Run-off from paved surfaces should be slowed down by the strategic placement of berms.
- As much vegetation growth as possible should be promoted within the proposed development area in order to protect soils. In this regard special mention is made of the need to use indigenous vegetation species to maintain a high level of biodiversity.
- All areas of disturbed and compacted soil need to be ripped and reprofiled before rehabilitation.
- Concurrent rehabilitation must take place throughout the construction phase.

Significance of the impact

Due to the nature of the impact (as described above), the significance of this impact without mitigation, is regarded to be medium to high. Implementation of the mitigation measures will decrease the significance of the impact to low-medium.

F-3.1.2 Surface and ground water contamination

Source and nature of the impact

Hydrocarbons (oil, petrol and diesel) and other chemicals/ liquids will be required during the construction phase. Spills and/or leakages could occur from construction vehicles and/or equipment. These spills could contaminate the surface and ground water should they occur simultaneously with a heavy rainfall event. Uncontrolled dumping of waste material on site will lead to pollution of the natural environment as well as faunal injury and mortality.

Table 15: Surface and ground water contamination

Impact source(s)	Hydrocarbon and other chemical spillages	Status	-
Nature of impact	Contamination of surface and ground water during heavy rainfall events		
Reversibility of impact	The impact is reversible by containing and clearing spills as and when they occur by means of an appropriate spill kit.		
Degree of irreplaceable loss of resource	Low		
Affected stakeholders	Surrounding and downstream land owners		

Magnitude	*Extent*	Regional – 3	
	Intensity	High – 5	
	Duration	Long Term – 4	
	Probability	Likely – 3	
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (3+5+4+3) x 4 = 60 Medium to high	M - H
	With mitigation	*WOM x ME = WM* 60 x 0.4 = 24 Low to medium	L - M

Mitigation measures

- Hazardous waste should be stored in compliance with regional, national and local legislation.
- Tenants that intend to store hazardous waste on site, must obtain a Waste Management License (WML) through the relevant Environmental Application Process, if required.
- Water passing through vehicle bays and workshops must pass through oil traps to ensure that all hazardous material is removed.
- The stormwater attenuation facilities must be designed to filter / trap any contaminates prior to water seeping into the ground or drainage lines.
- Construction should preferably take place during the dry season.
- All construction vehicles should be kept in good working condition.
- All construction vehicles should be parked in demarcated areas when not in use and drip trays should be placed under vehicles to collect any spillages/ leaks.
- If hydrocarbon spills occur these should be cleaned using SUNSORB (or similar product) and the contaminated soils removed from site and dispose of at an appropriate registered landfill site.

Significance of the impact

The significance of this impact is regarded as medium to high without mitigation, however, if spillages are effectively mitigated to reduce the likelihood of surface and/or ground water contamination, the significance will be reduced to low to medium.

F-3.1.3 Destruction of natural vegetation and faunal habitat

Source and nature of the impact

The clearing of vegetation and stripping of topsoil in specific areas during the construction phase is inevitable. These areas may include construction of the access road, internal roads, clearing of the site for construction, laydown areas, contractor's yards and the development footprint. Destruction of the natural vegetation and faunal habitat will result in the possible mortality of plants and animals.

Table 16: Destruction of natural vegetation and faunal habitat

Impact source(s)	Vegetation clearance for construction activities and the development footprint	Status	-
Nature of impact	Floral species may be lost and fauna may be displaced due to the removal of vegetation.		
Reversibility of impact	The impact is reversible should indigenous vegetation be planted as soon as site preparation is completed.		
Degree of irreplaceable loss of resource	Low		
Affected stakeholders	Surrounding and downstream land owners		
Magnitude	*Extent*	Regional -3	
	Intensity	Medium – 3	
	Duration	Long term – 4	
	Probability	Likely – 3	

Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (3+3+4+3) x 4 = 52 Medium	**M**
	With mitigation	*WOM x ME = WM* 52 x 0.4 = 20.8 Medium	**L - M**

Mitigation measures

- If any plants of conservation concern or plant species that are provincially protected will be destroyed or damaged during construction activities, these should be removed by a qualified botanist and replanted in a suitable area within the same property or the conservation area just north of the study site;
- The KZN Department of Agriculture, Forestry and Fisheries (DAFF) must be contacted for the relocation and removal of the provincially protected plant species;
- Construction activities through areas containing natural vegetation (such as riparian areas and bush clumps) should commence during the winter months to decrease impacts on breeding faunal species;
- An independent Environmental Control Officer (ECO) should be appointed to oversee all construction activities;
- No open fires should be allowed in areas containing natural vegetation, especially during the dry season; and
- Office areas and associated roads should be landscaped with indigenous plant species that will be beneficial to faunal species such as bats and birds.
- Any faunal species located on the site which cannot relocate themselves (e.g. burrowing mammals), should be moved in an ecologically acceptable manner to a more suitable location. This should be undertaken by a faunal relocation expert.
- Formalise access roads and make use of existing roads and tracks where feasible, rather than creating new routes through naturally vegetated areas.
- All areas affected by construction should be rehabilitated upon completion of the construction phase of the development. Areas should be reseeded with indigenous grasses as required.
- Use of construction vehicles in the riparian areas should be ceased.
- No dirty water run-off must be permitted to reach the riparian areas, wetlands and drainage lines.
- No fires whatsoever should be lit within the subject property.
- Construction workers may not tamper or remove natural vegetation from the surrounding areas and neither may anyone collect seeds from the plants.

Significance of the impact

Due to the large scale removal of vegetation to make space for the development, this impact is regarded as medium without mitigation. Implementation of mitigation measures will decrease the significance of the impact to low to medium.

F-3.1.4 Introduction and spread of alien invasive vegetation

Source and nature of the impact

During construction, vegetation will be removed and soil disturbed. The seeds of alien invasive species that occur on and in the vicinity of the construction area could spread into the disturbed areas. In addition, the construction vehicles and equipment were likely used on various other sites and could introduce alien invasive plant seeds or indigenous plants not belonging to this vegetation type to the construction site.

Table 17: Potential increase in alien invasive vegetation

Impact source(s)	Increase in alien invasive vegetation	Status	-
Nature of impact	Loss of biodiversity and faunal displacement		
Reversibility of impact	The impact is irreversible as the loss of natural vegetation will result in a loss of faunal habitat.		
Degree of irreplaceable loss of resource	High		
Affected stakeholders	Surrounding land owners		
Magnitude	*Extent*	Site -2	
	Intensity	High - 5	
	Duration	Long Term - 4	
	Probability	Definite - 5	
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (2+5+4+5) x 4 = 64 Medium to high	M-H
	With mitigation	*WOM x ME = WM* 64 x 0.4 = 25.6 Low to Medium	L - M

Mitigation measures

- During construction, the construction area and immediate surroundings should be monitored regularly for emergent invasive vegetation.
- Sufficient budget must be available by the subcontractor to ensure that alien plant clearing and rehabilitation takes place during and post construction.
- Surrounding natural vegetation should not be disturbed in order to minimize chances of invasion by alien vegetation.
- All alien seedlings and saplings must be removed as they become evident for the duration of construction and operational phase.
- Manual / mechanical removal is preferred to chemical control.
- All construction vehicles and equipment, as well as construction material should be free of plant material. Therefore, all equipment and vehicles should be thoroughly cleaned prior to access on to the construction site. This should be verified by the ECO.
- An alien invasive eradication and monitoring plan must be compiled and implemented during the construction phase whereby all emergent invasive species are removed during construction.

Significance of the impact

The significance of this impact is regarded as medium to high without mitigation, however, if the spread of alien plant species are effectively mitigated the significance will be reduced to low to medium.

F-3.1.5 Interference with fauna and faunal behavioral patterns

Source and nature of the impact

The presence of the construction site may result in negative faunal interactions that could be associated with construction personnel including poaching, trapping and hunting of faunal species, as well as possible collisions of fauna with construction vehicles. Construction will also result in high levels of noise, vibrations and the operation of floodlights should construction continue in the night. This will disturb the fauna utilising the surrounding vegetation, especially nocturnal species, and could result in a localised decrease in biodiversity as faunal species move away from the disturbance into the surrounding areas. Food and rubbish can attract wildlife to the area, increasing risk of negative interactions.

Table 18: Interference with fauna and faunal behaviour patterns

Impact source(s)	Construction-related activities and conduct of construction personnel		Status	-
Nature of impact	Interference with faunal behaviour patterns			
Reversibility of impact	The impact is reversible if mitigated to a large extent			
Degree of irreplaceable loss of resource	High			
Affected stakeholders	Surrounding land owners			
Magnitude	*Extent*	Site -2		
	Intensity	High - 5		
	Duration	Long term – 4		
	Probability	Highly likely – 4		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (2+5+4+4) x 4 = 60 Medium		M-H
	With mitigation	*WOM x ME = WM* 60 x 0.6 =24 Low to Medium		L - M

Mitigation measures

- Construction should commence in the winter months in order to minimise the impacts on the breeding activities of the terrestrial floral and faunal species.
- As far as possible, construction should be limited to the daylight hours in order to minimise the need for lights.
- An education programme should be compiled for all contractors, subcontractors and workers to ensure compliance to all aspects of the EMPr as well as educating personnel in the safe and proper conduct within areas of natural habitat.
- No wild animal may under any circumstance be handled, removed or be interfered with by construction workers;
- No wild animal may be fed on site.
- No wild animal may under any circumstance be hunted, snared, captured, injured or killed. This includes animals perceived to be vermin. Checks of the surrounding natural vegetation must be regularly undertaken to ensure no traps have been set. Any snares or traps found on or adjacent to the site must be removed and disposed of.
- No domesticated animals must be allowed on site.
- All food should be securely stored away to prevent attraction of faunal species and all rubbish should be disposed of away from the site. Bins located around the infrastructure should have tightly fitting lids to prevent faunal species raiding the bins and thereby becoming habituated to humans.
- To prevent possible collisions with animals, drivers of construction vehicles must remain vigilant to the possibility of animals crossing their paths and a strict speed limit should be adhered to.

Significance of the impact

The significance of this impact is regarded as medium to high without mitigation, however, if the spread of alien plant species are effectively mitigated the significance will be reduced to low to medium.

F-3.1.6 Loss of hydrological function impacting on downstream riparian habitat

Source and description of the impact:

During construction, wetlands and drainage lines will be severely impacted on, which may result in a change in the hydrological function of the system, impacting on riparian habitat outside of the study area boundaries.

Table 19: Loss of hydrological function impacting on downstream riparian habitat

Impact source(s)	Construction activities altering the hydrological functioning of the riparian systems.		Status	-
Nature of impact	Loss of functionality of the downstream riparian habitat			
Reversibility of impact	The impact is not reversible			
Degree of irreplaceable loss of resource	High			
Affected stakeholders	Surrounding land owners and downstream users			
Magnitude	*Extent*	Regional -3		
	Intensity	High – 5		
	Duration	Permanent – 5		
	Probability	Definite – 5		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (3+5+5+5) x 4 = 72 Medium to high		M - H
	With mitigation	*WOM x ME = WM* 72 x 0.4 = 28.8 Low to Medium		L -M

Mitigation measures

- A sound stormwater management plan has been developed to ensure that the hydrological function of the affected drainage lines remain intact (refer to the Services Report in Appendix 6); and
- Erosion into drainage lines located outside the study area should be prevented.

Significance of the impact:

The significance of the impact without mitigation is regarded to be medium to high. Implementation of the mitigation measures will decrease the significance of the impact from low to medium.

F-3.1.7 Loss of wetlands and their eco-services

Source and description of the impact:

Should the developer's preferred layout be adopted, construction activities such as site establishment, vegetation clearance, excavation and infilling of the wetlands for construction of the internal roads, buildings and associated infrastructure within the wetlands will result in the degradation / loss of the wetlands and the eco-services that they provide. The loss of wetlands will be permanent and irreversible. During the construction and operational phases of the TradeZone 2 development, a number of impacts can be expected on the downstream wetlands.

A number of impacts can be expected on the downstream wetlands and the impacts are discussed below:

Change in wetland hydrology due to:

- Increase in flood peaks due to the additional hardened surfaces upstream;
- Potential change in channel morphology due to increased flood peaks;
- A decrease in water input due to the removal of upstream soil storativity due to the covering of the soil surface by an impervious layer (i.e. the TradeZone 2 development). This will affect the ratio of subsurface to surface water inputs constituting the current hydrological regime of the upstream wetland system;
- Change in water distribution due to upstream impeding features, for example road culverts and erosion protection measures;
- Change in water distribution patterns due to infilling within the upstream wetlands.

Change in wetland geomorphology due to:

- Increase in erosion risks due to the increase in flood peaks and concentrated surface water runoff; and
- Increase in sediment load due to exposed surfaces, soil stockpiles etc.

Decline in water quality due to:

- Increase in sedimentation especially during the construction phase. This was evident in the wetlands downstream of the current construction activities for the Link Road. An increase in sedimentation will also impact on the Geomorphological and hydrological wetland drivers.
- Potential contamination by pollutants, for example accidental spills of hydrocarbons (oils, diesel etc) or leakage of such substances from construction machinery. Increased flows described above are expected to be accompanied by an increase in diffuse point pollution from petroleum and other pollutant runoff (Coke, 2006). These impacts may occur during both the construction and operation phases of the project and may enter the wetland directly through surface water runoff or indirectly through subsurface movement.

Negative impact on biotic factors.

- Loss of corridors through further habitat fragmentation was identified by INR (2011) as an impact for the Link Road and applies on an even greater scale for the proposed TradeZone 2 development. The existing remaining portions of wooded vegetation (primarily riparian vegetation along the tributaries of the Hlawe River) provides suitable habitat for a range of species to utilize as movement corridors. These habitats are already largely fragmented (due to the infrastructure). The proposed TradeZone 2 development area will further fragment these habitats by acting as a barrier for species migration.
- Loss of species of conservation concern. The loss of the wetlands within the area may result in a direct loss of these species or an indirect loss due to secondary impacts. Frogs are thin skinned animals and highly sensitive to contamination of their environment.
- Reduced water quality, as described above, could likely result in local declines in both diversity and abundance of frogs.
- Increase in alien and invasive plant species. Increased activity and vehicle traffic during construction and operation of the proposed TradeZone development could introduce additional alien plants. Vegetation disturbances to the general area could also prevent the recovery of vegetation and provide opportunities for increased infestations of alien plants downstream. Infestation of the Brazilian Red Pepper (*Schinus terebinthifolius* Raddi) – Category 1, was already evident in areas previously disturbed.
- The replacement of vegetation, although already disturbed, with infrastructure.

Table 20: Loss of wetlands and their eco-services

Impact source(s)	Construction activities and levelling of the site for construction of the TradeZone 2 development	Status	-
Nature of impact	Loss of functionality of the downstream wetlands Change in wetland hydrology Change in wetland geomorphology Decline in water quality Negative impact on biotic factors		
Reversibility of impact	The impact is not reversible		
Degree of irreplaceable loss of resource	High		
Affected stakeholders	Surrounding land owners and downstream users		

Magnitude	*Extent*	Regional -3	
	Intensity	High – 5	
	Duration	Permanent – 5	
	Probability	Definite – 5	
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (3+5+5+5) x 5 = 90 Medium	H
	With mitigation	*WOM x ME = WM* 90 x 0.6 = 54 Medium	M

Mitigation measures

- An off-site (north of the study area) wetland offset has been considered as mitigation for this project.
- In total, the wetlands within the study site represent 30.0 hectare equivalents of functional wetland area. To ensure a no-net-loss of wetland functional area from the local landscape, a gain of 30 ha-eq of wetland ecological integrity needs to be obtained through the successful rehabilitation of the candidate wetlands (*offset site*).
- Although it has been assumed that all wetlands within the project footprint will be lost, there may be areas within the footprint that are not covered by infrastructure. It is important to ensure that the vegetation within these areas is re-instated with indigenous vegetation (grasses and indigenous trees) as soon as practically possible once construction ceases, so as to stabilize erosion-prone areas.
- Although it is assumed that all wetlands will be lost within the development footprint, it is advisable to maintain biodiversity corridors with the wetland habitat (particularly the riparian fringes) acting as the link to the Hlawe River system.
- Biomonitoring programmes have been implemented for aquatic systems in the KSIA area. Such programmes must be continued and expanded to include sites that will monitor the impacts of the proposed TradeZone 2 development area.
- Permits for the translocation of faunal species must be obtained from EKZNW should species of conservation importance be found on the site. Capture operations must be supervised by a competent Herpetologist (frog and reptile specialist) and used to raise an understanding of the status of Herpetofauna in the area.
- Development of the proposed TradeZone 2 development area will cause most of the wetlands to be filled over and will extend the area of runoff. New erosion control measures will thus be needed, particularly where high runoff rates are likely to occur. The size and spacing of these structures should be based on sound hydrological and engineering concepts. In addition, the following measures should be implemented to reduce the risks of increased sedimentation in the downstream wetlands:
- Install sediment barriers (e.g. silt fences/sandbags/hay bales) immediately downstream of active work areas (including soil stockpiles) as necessary to trap any excessive sediments generated during construction. Excessive sediment was found within the wetlands of HGM Unit 2 due to erosion of the adjacent soil stockpiles.
- Any erosion gullies/channels created during construction should be filled immediately to ensure silt does not drain into the wetland.
- Both fauna and flora rescue plan required should any flora and fauna of conservation value be found on site.
- A Storm Water Management Plan in Appendix 6, is to be implemented by an appropriately qualified hydrologist. It is important that the plan takes into consideration the maintenance of flow volume and rate of the current wetland systems and tries to maintain these as far as possible.
- It is critical that a Water Management Plan be compiled post receipt of the EA and is implemented during the construction and operational phases of the proposed project to prevent contributing further to the problems facing the Hlawe and Tongaati River systems and introducing new problems. Aspects to be included in the plan, but not limited to, include:

- Monthly water quality monitoring of downstream wetlands, including the Hlawe River, during the construction phase and the first twelve months of the operational phase (as per the WUL requirements or other developments in the catchment).
- After the first year of operation the ongoing monitoring schedule will be defined in consultation with DWA.
- Ensure that a Water Use Licence (WUL) is obtained for all aspects of the project impacting on watercourses and wetlands.
- Ensure that all water, including, storm water runoff, entering the wetland meets the DWA WUL requirements and that the flow is dissipated to mimic the natural situation as far as possible to prevent erosion downstream.
- Ensure that clean and dirty water are separated and that the clean water re-enters the wetland systems in a dissipated flow.
- The proper storage and handling of hazardous substances (hydrocarbons and chemicals) needs to be administered.
- Operation and storage of machinery and construction-related equipment within wetland areas must be limited as far as possible.
- Ensure that appropriate solid waste disposal facilities are provided on-site during construction and adequate signage is provided.
- Spillages should be cleaned up immediately and contaminants properly drained and disposed of using proper solid/hazardous waste facilities (not to be disposed of within the natural environment). Any contaminated soil from the construction site must be removed and rehabilitated timeously and appropriately.
- Spill Contingency Plans should be drawn up by the individual business owners taking residence on site.
- Routinely check machinery for oil or fuel leaks before construction begins.
- Clear and completely remove from site all general waste, construction plant equipment, surplus rock, and other foreign materials once construction has been completed.

- Once operational, it is important to ensure that the following maintenance measures are implemented:
  - Ensure culverts are cleared of debris on a regular basis; and
  - Monitor and stabilise any head cut or gulley erosion that forms.

Significance of the impact:

The significance of the impact without mitigation is regarded to be high. Implementation of the mitigation measures to reduce the negative impact on the downstream wetlands and the implementation of rehabilitation of wetlands at the candidate (offset site) will decrease the significance of the impact to medium.

F-3.2 Socio-economic Environment

F-3.2.1 Increase in ambient dust levels

Source and nature of the impact

Construction activities, such as transportation vehicles travelling on exposed surfaces, earthworks as well as wind, will result in elevated ambient dust levels within the area. Increased dust levels may adversely affect persons working and/or residing in the nearby area.

Table 21: Increase in ambient dust levels

Impact source(s)	Transportation vehicles travelling over exposed surfaces, earthworks and the wind		Status	-
Nature of impact	Increased levels of ambient dust			
Reversibility of impact	The impact is irreversible but can be mitigated to a large extent			
Degree of irreplaceable loss of resource	Low			
Affected stakeholders	Surrounding land owners			
Magnitude	*Extent*	Site - 2		
	Intensity	Medium – 3		
	Duration	Short Term – 1		
	Probability	Likely – 3		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (2+3+1+3) x 4 = 36 Low to Medium		L - M
	With mitigation	*WOM x ME = WM* 36 x 0.4 = 14.4 Low		L

Mitigation Measures

- Appropriate dust suppression methods must be applied.
- Exposed soil stockpiles shall be covered, kept damp or protected using organic binding agents or alternative techniques that are not water intensive.
- The clearing of vegetation must be kept to a minimum and only where required.
- Avoid unnecessary movement of construction vehicles.
- Vehicles travelling on unsurfaced roads must travel at a speed that creates minimal dust entrainment.
- Refer to further mitigation measures in the EMPr.

Significance of the impact

The significance of this impact, without mitigation, is regarded to be low to medium. Implementation of the mitigation measures will decrease the significance of the impact to low.

F-3.2.2 Increase in ambient noise levels

Source and nature of the impact

Construction activities and movement of construction vehicles will increase the ambient noise levels within the area during the construction phase. This may impact on the people located at the adjacent properties, as well as sensitive faunal species within the study area.

Table 22: Increase in ambient noise levels

Impact source(s)	Construction activities		Status	-
Nature of impact	Increased level of ambient noise			
Reversibility of impact	The impact is irreversible but can be mitigated to a large extent			
Degree of irreplaceable loss of resource	Low			
Affected stakeholders	Surrounding land owners			
Magnitude	*Extent*	Site - 2		
	Intensity	Low – 1		
	Duration	Short term – 1		
	Probability	Likely – 3		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (2+1+1+3) x 3 = 21 Low to Medium		L-M
	With mitigation	*WOM x ME = WM* 21 x 0.6 =12.6 Low		L

Mitigation measures

- Construction times must be restricted to working hours (06:00 – 18:00).
- All construction equipment or machinery should be switched off when not in use.
- Construction equipment must be kept in good working condition.

Significance of the impact

Due to the limited number of noise receptors (adjacent landowners) the impact associated with increased ambient noise levels during the construction phase is predicted to be of a low to medium significance, however the implementation of mitigation measures will reduce the significance of the impact to low.

F-3.2.3 Change of visual character

Source and nature of the impact

The construction activities and camps will alter the current visual character of the area, from one of open sugar cane fields to a construction site associated with people, vehicles and equipment. There are a limited number of visual receptors (adjacent landowners) and employees of TradeZone 1in the area, however, most of them will have a direct view of the construction activities.

Table 23: Change of visual character of the area

Impact source(s)	Construction activities and placement of construction equipment		Status	-
Nature of impact	Visual character of the area will be altered by construction activities and equipment			
Reversibility of impact	The impact is irreversible but will be less visually intrusive if appropriate mitigation measures are adopted			
Degree of irreplaceable loss of resource	Medium			
Affected stakeholders	Surrounding land owners			
Magnitude	*Extent*	Regional -3		
	Intensity	Medium – 3		
	Duration	Short to Medium term – 2		
	Probability	Highly likely – 4		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (3+3+2+4) x 4 = 48 Medium		M

	With mitigation	*WOM x ME = WM* 48 x 0.6 =28.80 Low to Medium	L - M

Mitigation measures

- The construction area must at all times be neat and tidy.
- All litter must be collected and removed (daily) and disposed of appropriately.
- Equipment and construction vehicles must be stored or parked in designated areas.
- The construction camp must be screened with shade cloth.
- If construction is necessary during night-time, light sources should be directed inwards and downwards to prevent obtrusive lighting and light pollution.
- Dust suppression techniques should be implemented especially on windy days. Exposed soil stockpiles shall be covered, kept damp or protected using organic binding agents or alternative techniques that are not water intensive.

Significance of the impact

The visual impact associated with construction activities during the construction phase is predicted to be of a medium significance; however the implementation of mitigation measures will reduce the significance of the impact to a low-medium.

F-3.2.4 Impact on traffic patterns within the area

Source and nature of the impact

Due to construction activities and associated machinery movement, the traffic patterns of the surrounding roads network will be affected. Peak hour ranges from 07h00 to 08h00.

Table 24: Change in traffic patterns of the area

Impact source(s)	Construction activities and vehicle movement		Status	-
Nature of impact	Traffic patterns of the surrounding area will be affected			
Reversibility of impact	The impact is irreversible but will be less intrusive if appropriate mitigation measures are adopted			
Degree of irreplaceable loss of resource	Low			
Affected stakeholders	Surrounding land owners and road users			
Magnitude	*Extent*	Regional -3		
	Intensity	Medium – 3		
	Duration	Medium Term - 3		
	Probability	Definite - 5		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (3+3+3+5) x 5 = 70 Medium - High		M – H
	With mitigation	*WOM x ME = WM* 70 x 0.6 =42 Medium		M

Mitigation measures

- Avoid movement of construction vehicles and machinery on main access roads during peak times (7:00 – 9:00) & (16:00 – 18:00).
- If the above is unavoidable – implement traffic control measures such as points men at busy intersections.

Significance of the impact

The impact that construction related traffic would have on this the current traffic patterns is predicted to be of a

medium to high significance without mitigation measures, however, this impact can be reduced to a medium significance if appropriate measures are adopted.

F-3.2.5 Impacts on heritage resources

Source and nature of the impact

1. A Collapsed House (possibly over 60 years old)

The HIA investigation revealed the presence of a house ruin (which could be older than 60 years). This structure is protected by the National Heritage Resources Act (NHRA) and if a decision to demolish it is taken, a Phase II assessment by a Built Heritage Specialist and a Permit Application lodged with KwaZulu-Natal Provincial Heritage Resources Authority (Amafa) will be required.

Table 25: Impacts on heritage resources

Impact source(s)	Construction of the proposed DTP TradeZone 2 development		Status	-
Nature of impact	Impacts on the heritage resource (as listed above)			
Reversibility of impact	The impact is irreversible			
Degree of irreplaceable loss of resource	Low			
Affected stakeholders	Families associated with the collapsed house and surrounding landowners			
Magnitude	*Extent*	Site – 2		
	Intensity	Medium – 3		
	Duration	Long-term - 4		
	Probability	Highly likely - 4		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (2+3+4+4) x 3 = 39 Low to Medium		L-M
	With mitigation	*WOM x ME = WM* 39 x 0.4 =15.6 Low		L

Mitigation measures

The old collapsed house could be older than 60 years and could therefore be protected by the NHRA and if a decision to demolish is taken, a Phase II assessment by a Built Heritage Specialist and a Permit Application lodged with KwaZulu-Natal Provincial Heritage Resources Authority (Amafa) will be required.

Construction activities should be limited to the proposed development boundary. If the size of the footprint is increased at a later stage, a heritage specialist should be involved in order to assess how the increase in the size of the footprint will affect heritage resources.

If it is believed that the heritage resources identified outside the study area will be affected by the development, permit applications must be logged with Amafa.

Should any archaeological artefact be exposed during foundation excavation, the construction in the vicinity of the findings must be stopped. Under no circumstances shall any artefact be destroyed. Such an archaeological site must be marked and fenced off, and Amafa must be contacted.

Upon receipt of such notification, the Environmental Control Officer (ECO) must arrange for the excavation to be examined by an Archaeologist. Under no circumstances must archaeological artefacts be removed, destroyed or interfered.

Any archaeological sites exposed during demolition or construction activities must not be disturbed prior to authorisation by Amafa.

Significance of the impact

The impact associated with construction of the proposed DTP TradeZone 2 development on the destruction of heritage resources during the construction phase is predicted to be of a low to medium significance without mitigation measures, however, this impact can be reduced to a low significance if appropriate measures are adopted.

F-3.2.6 Temporary job creation

Construction is anticipated to take place over five years. Temporary employment opportunities will be created during the construction phase, via construction related activities such as:

- Construction of roads and structures that comprise the Trade Zone 2 development and services infrastructure; and
- Fencing of the site boundary area.

Skilled labour in the construction industry is available in the NUDC area, but would require upskilling and development of more specialised skills. Due to the high percentage of unemployment in the area, sufficient unskilled labour is available for the project and the community in which the labour resides in close proximity to the development site.

The project will be used from the start to train people and transfer skills as far as possible. The tender specifications for any construction work on the project will include a compulsory utilisation of a certain percentage of local labour and the compulsory training of local labour.

In light of the above, the project will positively impact on the surrounding community and local economy due to possible skills development and income generation. This impact is predicted to have a **medium positive significance**.

F-4 IMPACT ASSESSMENT: OPERATIONAL PHASE

F-4.1 Biophysical Environment

F-4.1.1 Surface and ground water contamination

Source and nature of the impact

Due to the nature of the development (commercial) hydrocarbons (oil, petrol and diesel) and other chemicals/ liquids will be required during the operational phase and will be stored at a fuel storage facility in bunded areas at the General Aviation land use area. Although unlikely, spills and/or leakages could occur and enter the stormwater management system and thus potentially contaminate surrounding surface and ground water resources.

Table 26: Surface and ground water contamination

Impact source(s)	Hydrocarbon and other chemical spillages		Status	-
Nature of impact	Contamination of surface and ground water during heavy rainfall events			
Reversibility of impact	The impact is reversible by containing and clearing spills as and when they occur by means of an appropriate spill kit			
Degree of irreplaceable loss of resource	Low			
Affected stakeholders	Surrounding and downstream land owners			
Magnitude	*Extent*	Regional -3		
	Intensity	High – 5		
	Duration	Permanent - 5		
	Probability	Definite – 5		
Significance	*Without mitigation*	*Extent + Intensity + Duration + Probability) x WF* (3+5+5+5) x 2 = 36 Low to medium		L - M
	With mitigation	*WOM x ME = WM* 36 x 0.4 =14.4 Low		L

Mitigation measures

- The stormwater attenuation facilities must be designed to filter / trap any contaminates prior to water seeping into the ground or adjacent drainage lines.
- If a hydrocarbon spillage occurs these should be cleaned using SUNSORB (or similar product) and the contaminated soils/ materials removed from site and dispose of at an appropriate registered landfill site.
- All spilled hazardous substances must be contained in impermeable containers for removal to a licensed hazardous waste site, (this includes contaminated soils, and drenched spill kit material).
- The fuel storage areas at the General Aviation area must be clearly demarcated and restricted to designated staff only. The fuel storage area must be adequately bunded to ensure that no contamination of underground water and catchment areas occurs.
- The transport, handling and storage of hazardous substances must comply with all the provisions of the Hazardous Substances Act, 1973 (Act No. 15 of 1973), associated regulations as well as SANS 10228 and SANS 10089 codes.
- A Contingency Plan must be put into place in case of leakages or spillages which are not detected and then lead to the contamination of underground water. Leak detectors on pressure systems must be included.
- Monitoring of volumes of the tanks must take place on a daily basis to detect unexplained losses due to leakages.
- In the event of a spill, hazardous material may be generated. Such material must be disposed of at

a suitably licensed waste disposal facility, with chain of custody documentation supplied as proof of end recipient.

- Hazardous and flammable substances must be stored and used in compliance with the applicable regulations and safety instructions and bunded at 110% of the volume.

Significance of the impact

The significance of this impact is regarded as low to medium to low without mitigation, however, if spillages are effectively mitigated and stormwater attenuation facilities maintained, the significance will be reduced to low.

F-4.1.2 Soil contamination

Source and nature of the impact

The use of hazardous materials such as synthetic herbicides and pesticides to control weeds and pests in the planted area could contaminate ground water and soil in the study area and immediate surrounds. Herbicides and pesticides often contain glyphosphate which is very poisonous to various faunal species including tadpoles and frogs. These herbicides are often used in alien plant control.

The release of grey water into the environment, especially for irrigation should be carefully controlled to prevent contamination of the environment by detergents and soaps. Hazardous materials used during aviation activities have the potential to contaminate soils, watercourses and ground water.

Table 27: Soil contamination

Impact source(s)	Use of pesticides and herbicides containing hazardous materials Release of grey water into the environment Spillage of hazardous material caused by Aviation-related activities		Status	-
Nature of impact	Contamination of the soil, surface and groundwater resources			
Reversibility of impact	The impact is irreversible if hazardous materials area used.			
Degree of irreplaceable loss of resource	Low			
Affected stakeholders	Surrounding and downstream land owners			
Magnitude	*Extent*	Regional -3		
	Intensity	High – 5		
	Duration	Permanent - 5		
	Probability	Highly likely – 4		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (3+5+5+4) x 2 = 34 Medium - Low		M-L
	With mitigation	*WOM x ME = WM* 34 x 0.4 =13.6 Low		L

Mitigation measures

- Where possible mechanical removal of unwanted plant species is favoured over chemical control.
- Should chemical control be required, only biodegradable agents should be permitted.
- The use of ecologically acceptable biological control agents is favoured over chemical pest control.
- The use of indigenous plant species for the project will minimise the need for pest control.
- Spillages should be dealt with as soon as possible.
- Hazardous waste should be stored in compliance with regional, national and local legislation.
- Water passing through vehicle bays and workshops must pass through oil traps to ensure that all hazardous material is removed.

Recommendations for use of grey water

The use of grey water can drastically reduce the amount of white water required by the project and the following is recommended:

- Water from hand basins, showers and washing machines should be captured and redirected to flush toilets.
- If grey water from basins, showers or washing machines are to be used for irrigation, all detergents used must be 100% biodegradable to prevent negative impacts on the environment.
- Rainwater can be captured by fitting tanks to roof gutters and the water can be used for either irrigation or flushing of toilets.
- Grey water should be used immediately to prevent contamination.

Significance of the impact

The significance of this impact is regarded as medium to low without mitigation, however, if the use of pesticides and herbicides and grey water are effectively mitigated the significance will be reduced to low.

F-4.2 Socio-economic Environment

F-4.2.1 Increase in ambient noise levels

Source and nature of the impact

Industrial development and associated aviation-related activities are compatible land-uses that will complement the adjacent KSIA and DTP. The proposed Trade Zone 2 will occur within the sensitive noise zones of 55dB for 2010, 2015 and 2035 noise contours of the KSIA. The site is presently impacted by noise generated from aircraft flights. It is anticipated that the activities at the proposed Trade Zone 2 development site in relation to the present noise levels at the KSIA/DTP precinct will not result in a significant increase in the ambient noise levels of the area. The impact of increase in ambient noise levels at the site is therefore **not significant**.

However, in view of the close proximity of the proposed development to the airport, it is recommended that the design of the buildings within the study area incorporate noise reduction principles to minimize noise impacts on the occupants.

F-4.2.2 Permanent change of visual character

Source and nature of the impact

The existing KSIA/DTP development is notably an extensive feature in the landscape and the land uses of the proposed development may blend in or be compatible with these adjacent land uses. There are no residential areas in close proximity to the site and therefore, the proposed development will not be visually obtrusive. The impact of change in visual character of the site is therefore **not significant**.

F-4.2.3 Permanent job creation

Permanent jobs will be created during the operational phase of the project. A number of additional direct job opportunities will be created. The number of employment opportunities is also directly linked to the diversity of activities (cleaning, security, maintenance, business development). Local labour will be sourced for the operational phase to upskill the local community and assist in alleviating poverty.

This will positively impact on the surrounding community and local economy due to possible skills development and income generation. This impact is predicted to have a **high positive significance.**

F-4.2.4 Possible positive impacts associated with the development

a) Eradication of alien invasive species within the study area and surrounding areas

The study area and surrounding areas are heavily infested with alien invasive species, especially *Bombusa balcooa* (Indian Bamboo) which can grow at a rate of over 10m a year. These plants have a very high impact on the drainage lines within the area, consuming large amounts of water and out-competing indigenous species. It is recommended that all alien invasive vegetation should be cleared from the study area as well as immediate surroundings and thereby improves local biodiversity. An alien species eradication programme, tailored for the area should be developed by a suitably qualified botanist or ecologist.

b) Development of a biodiversity strategy

The study area contains areas which have been degraded due to agriculture (sugarcane) and other impacts from humans (including extensive invasion by alien vegetation). Through the establishment of a sound biodiversity strategy for the development which can be initialized before construction commences, negative impacts can be greatly reduced while biodiversity is increased. Principles of the biodiversity strategy should include:

- Effective use of grey water to reduce footprint;
- Species management plans for Rare, Threatened or Protected species recorded on site;
- Propagation of indigenous and endemic trees, shrubs, succulents and grass which can be used for landscaping and rehabilitation;
- Erection of bat and owl nesting boxes to encourage these species to reside in the area resulting in environmentally friendly insect and rodent control.

F-5 CUMULATIVE IMPACTS

Cumulative impacts are those impacts that are created as a result of the combination of the impacts of the proposed project, with impacts of other projects or operations, to cause related impacts. These impacts occur when the incremental impact of the project, combined with the effects of other past, present and reasonably foreseeable future projects, are cumulatively considerable. The assessment of cumulative impacts on a site-specific basis is however complex – especially if many of the impacts occur on a much wider scale than the site being assessed and evaluated.

F-5.1.1 Increase traffic during the operational phase

Source and nature of the impact

A total of 3 501 private vehicle trips per hour will be generated by the proposed DTP development in the AM and PM peak hours. During the AM peak hour, 2 503 vehicles per hour (veh/h) will enter the development while 997 veh/h will exit the development when it reaches 100% completion. The converse of these volumes is also applicable to the PM peak hour.

The trip distribution is anticipated to be as follows:

- 84% of DTP Trade Zone 2 development traffic will access the development from the south.
- 60% of development traffic will access the Trade Zone 2 through R102.
- The other 24% of development traffic will travel on the N2 Freeway and access the Trade Zone 2 through the Tongaat interchange and uShukela Drive.
- The remaining 16% of the development traffic will originate from the Tongaat, N2 north and Westbrook areas.

The above trip distribution is the same as for the uShukela Precinct Planning (a proposed mixed-use development adjacent north of the KSIA/DTP precinct, undertaken by Tongaat-Hulett Developments and DTPC).

Table 28: Increase of traffic during the operational phase

Impact source(s)	The proposed DTP Trade Zone 2 development in conjunction with other proposed projects (such as uShukela Precinct) within the NUDC		Status	-
Nature of impact	Cumulative increase of traffic volumes			
Reversibility of impact	The impact is irreversible but can be mitigated through the upgrade of existing intersections			
Degree of irreplaceable loss of resource	N/A			
Affected stakeholders	Surrounding land owners and road users			
Magnitude	*Extent*	Regional -3		
	Intensity	High – 5		
	Duration	Long-term – 4		
	Probability	Definite – 5		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (3+5+5+4) x 5 = 85 High		H
	With mitigation	*WOM x ME = WM* 85 x 0.4 =34 Low - Medium		L-M

Mitigation measures

A Traffic Impact Study for the proposed development was conducted by Aurecon (refer to Appendix 6). To accommodate the anticipated traffic calculated by the study on the surrounding road network, the following mitigation measures are proposed through intersection improvements:

- The link capacity of the R102 and uShukela Drive be increased by providing dual lanes per direction on each link. This should be implemented by ETA/ KZNDOT within 5 years as the existing traffic condition is not favourable.
- The existing uShukela Drive / Tongaat off-ramp eastern intersection should be converted into a traffic signal controlled intersection in order to reduce delays experienced by the right turning traffic from uShukela Drive west approach towards Durban, it is recommend that a protected signal phase be provided.
- The existing uShukela Drive / Tongaat off-ramp western intersection should be converted into a traffic signal controlled intersection in order to reduce delays experienced by the right turning traffic from off-ramp approach towards Westbrook. It is further recommended that a left slip lane towards Tongaat should be provided.
- The new proposed DTP Spine road intersection on uShukela Drive should be signalised. Exclusive turning lanes should be provided as recommended in Chapter 11 of the TIA.
- The existing intersection of uShukela Drive and R102 should be upgraded as per Chapter 11 of the TIA.
- The proposed Brake Drive Link road is required to intersect with the main DTP Spine Road (*will be subject to a separate Environmental Application*). It is further recommended that the intersection of R102 and Brake Drive should be upgraded. Refer to Chapter 11 of the TIA for thorough details.
- The TIA should be submitted to the eThekwini Municipality, KZN DOT and SANRAL for approval.

Significance of the impact

The cumulative impact of an increase in traffic volumes caused by the proposed development, in conjunction with other proposed projects in the area, would be high. This impact, however, can be mitigated to have a low-medium impact through the upgrading of existing intersections and the construction of an access road from Brake Drive to link up with the DTP Spine Road (*currently under construction*).

F-5.1.2 Cumulative net loss of wetlands on site and total loss of wetland habitat in the KSIA/DTP development precinct

Source and nature of the impact

The KSIA and associated developments (proposed and current) are encroaching on the Hlawe River catchment. Although this river catchment is already heavily impacted on, the loss of further wetlands within the catchment will only compound this impact. The Hlawe River drains into the Tongaati River approximately 3.5km from the proposed TradeZone 2 development area. Although there are no Freshwater Ecosystem Priority Area (FEPA) wetland systems on site, downstream of the confluence with the Tongaati River there are a number of FEPA wetland systems. These systems have been identified by the country as Ecosystem Priority Areas. In accordance with the FEPA Implementation Manual (Driver et al, 2011) land-use practices or activities that will lead to deterioration in the current condition of a wetland FEPA are not acceptable. The loss of the majority of the Hlawe River Catchment could therefore impact on the current condition of these downstream priority areas. Aspects that may be impacted on include:

- A change in wetland hydrology. The cumulative increase in hardened surfaces within the Tongaati Catchment, due to the KSIA and associated developments, will result in a change in flow due to a decrease in sub-surface flow and an increase in flood peaks,
- A decline in water quality. A further decline in surface water quality in terms of both sedimentation and pollutants be expected
- A decline in habitat availability and species composition and diversity, in the aquatic biota of the Hlawe River, caused by industrial and agricultural practices. The proposed development of the TradeZone 2 development and additional developments within the greater KSIA project boundary could add a cumulative impact and cause further decline of the aquatic biota in the Tongaati River Catchment as a result of declining water quality.

Table 29: Loss of wetlands through infilling

Impact source(s)	Loss of wetlands through infilling		Status	-
Nature of impact	Cumulative loss of wetlands through developments on a regional and local level			
Reversibility of impact	The impact is irreversible			
Degree of irreplaceable loss of resource	High			
Affected stakeholders	Surrounding land owners and road users			
Magnitude	*Extent*	Regional -3		
	Intensity	High – 5		
	Duration	Permanent – 5		
	Probability	Definite - 5		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (3+5+5+4) x 5 = 90 High		H
	With mitigation	*WOM x ME = WM* 90 x 0.6 =54 Medium		M

Mitigation measures

- Offsite mitigation: the identification of suitable wetland habitat outside the boundaries of the development, and the implementation of rehabilitation measures that result in an appropriate gain in hectare equivalents. This will compensate for the functional wetland area lost to the development;
- An offsite wetland offset has been investigated for this project. The candidate offset site occurs north of the study area and within the same catchment area as the study site i.e. Tongati River Catchment. This is aimed at counterbalancing the wetlands to be removed through the activities associated with the proposed development.

- The following rehabilitation objectives are proposed for the wetlands at the offset site:
  - To restore the natural hydrology to the wetland habitat. This may be achieved by deactivating the drainage networks;
  - To increase the retention time of water within the wetlands;
  - To distribute point-source discharge evenly across wetlands;
  - To remove all confined flow within the systems;
  - To re-establish a mosaic of natural wetland communities according to the various zones of saturation. An additional aim would be to establish woody hygrophilous communities within a herbaceous matrix, stratifying the structure of the vegetation; and
  - To deactivate and stabilise all actively eroding surfaces.
- The following wetland rehabilitation strategy is proposed:
  - Use spreader canals and berms to direct the water across the width of the wetlands below the confinements of flow such as pipes and culverts;
  - Bulldoze and shape all drain networks and ridge-and-furrow areas to restore the natural microtopography;
  - Raise the water table within incised central channels by using gabion weirs to re-establish a new base-level. Gabions will trap sediment and water upstream, facilitating in-channel vegetation growth while allowing water to move through the obstruction to the downstream reaches;
  - Stabilise headcuts using concrete or gabion structures;
  - Larger drains may also be deactivated using earthen plugs;
  - Implement an alien plant eradication programme;
  - Establish riparian woody vegetation along the major channels;
  - Once the soil has become saturated, implement an active re-vegetation programme.
  - Certain hydrophytes will recolonize the wetland naturally, but many wetland plants are clonal, and populations would need to be transplanted from nearby intact wetlands to re-establish colonies.
  - Include a rehabilitated buffer around the wetland to re-establish the ecotone between aquatic and terrestrial habitat, and to absorb some of the continuing impacts from the surrounding land use. Examples of these would be sediment trapping, establishing ecological connectivity, and trapping phosphates and nitrates.
- It should be noted that long-term wetland rehabilitation entails the management of the catchment to ensure that the hydrological regime remains compatible with maintaining the wetlands in their desired state. This places constraints on future land use. Future developments within the offset site should be carefully planned around the core objective of maintaining the wetland in their post-rehabilitation state.
- The wetland functioning offset target is 30ha-eq, based on the priority objective of securing a no-net-loss of wetland functioning from the landscape;
- The risk-of-failure multiplier is 1.5, which increases the target to 45ha-eq;
- The temporal multiplier is also 1.5, increasing the target to 67.5ha-eq;
- In the Wetland Ecologist's opinion (WCS) applying the temporal multiplier is unnecessary given the low biodiversity value of the wetlands in the proposed development site;
- The proposed offset site contains approximately 154ha of wetland habitat;
- It is considered to appropriately fulfil all of the important requirements for an offset site;
- Rehabilitation of the wetlands within the site may potentially improve the integrity of the wetlands to the extent that the number of hectare equivalents may be increased to 103.6ha. This is a potential gain of 49.4ha-eq, this after a conservative estimate of the post-rehabilitation ecological state of the candidate wetlands;
- This will appropriately achieve the no-net-loss functional area target, as well as provide leeway for any potential risk of failure of certain interventions;
- The biodiversity component of the offset, using the threat-status multiplier, was not included in this study because the method of calculation of the multiplier is in the process of being formulated. This

should be reviewed once this is available;
- The candidate site is considered appropriate and suitable for achieving both the wetland functioning target offset and the biodiversity target offset for the proposed development.

Significance of the impact

The cumulative net loss of wetlands within the proposed KSIA/DTP Precinct is high. Through the implementation of mitigation measures such as the rehabilitation of the wetlands at the candidate offset set, the impact will be medium.

F-5.1.3 Cumulative impacts of proposed development and other developments in the KSIA/DTP Development Precinct

Source and nature of the impact

The Dube Aerotropolis aims to unlock a new layout of urban form comprising of aviation intensive businesses and related enterprises extending up to 25 kilometres outward from the airport. There are various other developments proposed that will support future expansion of the airport to meet both national and international standards. Land uses such as telecommunications, retail outlets, entertainment complexes and exhibition centers, business parks, logistics parks, industrial land uses, distribution centers, information technology complexes and wholesale merchandise marts may be located around the airport and along the transportation corridors radiating from them.

With the increased demand placed on development within the DTP/KSIA precinct, there would be increased demand placed on the existing municipal services to provide both civil and electrical services for the developments in the pipeline and the proposed development.

Environmentally sensitive habitats such as water resources and important biodiversity corridors/conservation areas may be impacted by construction activity within the KSIA/DTP Development Precinct.

Table 30: Impact of proposed development and other developments in the KSIA/DTP Development Precinct

Impact source(s)	Proposed development and other developments in the KSIA/DTP Precinct		Status	-
Nature of impact	Cumulative loss of wetlands through developments on a regional and local level Increased demand on municipal infrastructure Decreased biodiversity through loss of habitats			
Reversibility of impact	The impact is irreversible but can be mitigated through environmentally sensitive planning			
Degree of irreplaceable loss of resource	N/A			
Affected stakeholders	eThekwini Municipality Surrounding land owners Environmental activists			
Magnitude	*Extent*	Regional -3		
	Intensity	High – 5		
	Duration	Permanent – 5		
	Probability	Definite - 5		
Significance	*Without mitigation*	*(Extent + Intensity + Duration + Probability) x WF* (3+5+5+5) x 5 = 90 High		H
	With mitigation	*WOM x ME = WM* 90 x 0.4 =36 Low - Medium		L-M

Mitigation measures

- Environmentally-sensitive planning must take precedence, where avoidance of destruction of conservation areas and water resources are considered to minimise the impact on biodiversity;
- The following service infrastructure would be required to be constructed:
  - In order to provide water to the proposed development, a second reservoir, 2.2Ml in size is proposed near the Inyaninga Reservoir to make up for the shortfall in storage available.
  - The temporary Northern Waste Water Treatment Works is reaching its maximum functional capacity and therefore, proposed Hlawe sewerline linking the DTP/KSIA development into the Tongaat Waste Water Treatment Works must be finalised and approved.
  - A long-term solution to provide for the water and sewerage needs for the KSIA/DTP Precinct (*as a whole*) is required and the principles of sustainable development must be taken into consideration in the planning of such infrastructure such as the Umdloti Regional Waste Water Treatment Works currently under consideration by eThekwini Water and Sanitation.

Significance of the impact

The cumulative impact of the construction of the Trade Zone 2 development, in conjunction with other proposed projects in the area, would be high. This impact, however, can be mitigated to have a low-medium impact through the implementation of sustainable development principles that take the 'conservation areas' and environmentally sensitive habitats into consideration.

F-5.1.4 Increased loss of viable and high potential agricultural land

Source and nature of the impact

The current land use is predominantly sugarcane production. The agricultural potential of the site is medium to high depending the soil depth and slope. The sugar cane yield potential is 40 tons per hectare for the shallow and sandy soils and approximately 60 tons per hectare for the structured soils on lower slopes. This is also due to the increased water availability to the crop on lower slopes. The Swartland soils (and other pedocutanic soils on the site) are prone to erosion. Production of sugarcane takes place on large areas with slopes in excess of 10 %. These sloped areas pose significant risks in terms of tillage and crop production induced erosion. The erosion pressures on the site are evident in the massive erosion effects observed in the stream and drainage channels. Crop production on duplex soils on steep slopes exacerbates erosion risks. This is a particularly relevant risk for the north eastern section of the site. The drainage features are eroded and show signs of high energy pulses of water moving through the landscape. This is a function of high levels of runoff.

The current land use in the form of dryland sugarcane production is the optimal use for the land. Although other crops can be produced on the red structured soils their production potential will be limited on the shallower and duplex soils (dominating the specific site). Irrigated land uses are not advised for most of the site as the slopes are such that distinct erosion is predicted. The duplex and shallow soils are prone to erosion and cultivation of these soils should only continue in the presence of a dedicated land management plan in terms of erosion control and mitigation.

The impacts of road construction activities on agricultural production on the site are large as a significant portion of the land has already been altered. In addition, these activities isolate areas that formed a unit in the past leading to detrimental impacts on site management and hampered sugarcane production. **Due to the existing impacts on the site, the further impacts from additional development will be relatively small. In terms of agricultural activities and current land use, the impacts of the land use change is considered to be negligible on the surrounding areas.**

F-5.1.5 Increase in economic growth

The DTP Trade Zone 2 development will expand on the business, freight and passenger logistics facility that was constructed at Phase 1. The proposed development will create a highly competitive operating environment that will be geared to attract a wide range of investors, operators, users and tenants.

Phase 1 of the KSIA/DTP serves as a trade and logistics gateway for Southern Africa. It is therefore important to ensure this foundation and the associated significant investment that has been made is fully utilized and supported. The proposed TradeZone 2 development will significantly contribute and complement this existing infrastructure that has been created. Furthermore, the development will also utilize and support the New Spine Road (*Link Road*) that is currently under construction as well as the proposed Maintenance Repair and Overhaul (MRO) facility for large aircrafts, currently under review by the DEA.

The greater La Mercy region, where the KSIA is located has, for some time, been identified for light industrial, new housing, economic and employment opportunities. The proposed development proposal aims to unlock these opportunities and in so doing contribute to the Dube Aerotropolis7 development plans. Local labour will be required for the construction of the proposed TradeZone 2 development. Skills transfer and capacity building will be the spin-offs for this development. With the added revenue that the proposed development will generate during the operational phase, through the proposed light industrial land uses and cargo terminal activities, there would be contribution towards Local Economic Development (LED) of the region.

The existing KSIA/DTP development is seen as a key economic generator in the province and the future growth of the precinct is foreseen. Additional infrastructure in the form of the proposed Trade Zone 2 development is therefore required to support the growth needs of the KSIA/DTP Phase 1 development.

Since the proposed development is earmarked to support the KSIA/DTP Development Precinct, this will impact have a **positive impact of high significance** on the economy of the province, through an increase of employment opportunities, skills transfer, capacity building and business development.

[7] KSIA is a core piece of infrastructure with access to sea, road and rail linkages, within one of Southern Africa's strongest regional economies.
DTP development strategy will guide the development of the entire Airport City and create significant opportunities for all businesses in surrounding area (www.thdev.co.za/developments/aerotropolis/overview).
An Aerotropolis is a new layout of urban form comprising of aviation intensive businesses and related enterprises extending up to 25 kilometres outward from major airports (http//:en.wikipedia.org/wiki/Aerotropolis).

SECTION G: CONCLUSIONS AND RECOMMENDATIONS

In accordance with the EIA Regulations (GN No. 543), this section provides a summary of the key findings of the EIA and a comparative assessment of the positive and negative implications of the proposed activity and identified alternatives. This section also provides a reasoned opinion as to whether the activity should or should not be authorised and conditions that should be made in respect of that authorisation, as necessary.

G-1 SUMMARY OF THE KEY FINDINGS OF THE EIA

It is the opinion of the EAP that should the project proceed, impacts on the surrounding natural areas can be minimised through the careful adherence to suggested mitigation measures. It is also recommended that the possible impacts on the 'conservation areas' and downstream hydrological systems are monitored throughout the duration of the project.

The new DTP incorporating the KSIA not only provides for an increased number of passengers and direct international flights, but critically, a new trade and logistics gateway for Southern Africa. It is therefore important to ensure this foundation and the associated significant investment that has been made is fully utilized and supported. For this reason, the proposed Trade Zone 2 development will significantly contribute and complement this existing infrastructure that has been created. Furthermore, the development will also utilize and support the much needed new link road that is currently under construction as well as the proposed Maintenance Repair and Overhaul (MRO) facility for large aircrafts, currently under review by the DEA.

The greater La Mercy region, where the KSIA is located has, for some time, been identified for light industrial, new housing, economic and employment opportunities. The proposed development proposal aims to unlock these opportunities and in so doing contribute to the Dube Aerotropolis[8] development plans. There is a substantial amount of existing and/or new service infrastructure proposed for this area and this development would therefore contribute towards the effective use of this infrastructure's capacity.

The proposed development will contribute towards job creation, economic growth, poverty reduction, community development, skills development and capacity building.

Should the Developer's Preferred Layout be implemented, there will be total infilling of all the wetlands on the site for the proposed development. To mitigate this impact, the proponent intends to rehabilitate wetlands at a candidate offsite site and these wetlands have been identified as National Ecosystem Priority Area and critical in terms of eZemvelo Conservation Plan. A candidate site has been identified that occurs north of the study area, within the same catchment as the study site i.e. Tongati River Catchment. In total, the wetlands within the study site represent 30.0 hectare equivalents of functional wetland area. To ensure a no-net-loss of wetland functional area from the local landscape, a gain of 30 ha-eq of wetland ecological integrity needs to be obtained through the successful rehabilitation of the candidate wetlands. Through successful wetland rehabilitation, the ecological integrity of the wetlands of the candidate site will be improved. This could potentially yield a gain of 49.4ha-eq.

The findings of the specialist studies undertaken together with the broader environmental assessment conclude that there are no fatal flaws that should prevent the project from proceeding. However, the following

[8] KSIA is a core piece of infrastructure with access to sea, road and rail linkages, within one of Southern Africa's strongest regional economies.
DTP development strategy will guide the development of the entire Airport City and create significant opportunities for all businesses in surrounding area (www.thdev.co.za/developments/aerotropolis/overview).
An Aerotropolis is a new layout of urban form comprising of aviation intensive businesses and related enterprises extending up to 25 kilometres outward from major airports (http//:en.wikipedia.org/wiki/Aerotropolis).

key impacts have been identified which will require the application of site and activity specific mitigation measures. These mitigation measures are included within the EMPr to ensure that they receive the necessary attention.

Table 31: Summary of the significance of identified impacts without and with mitigation measures

Impact	Significance	
	Without Mitigation	With Mitigation
Construction Phase		
Biophysical Environment		
Soil erosion and silting of the wetlands, riparian areas and drainage lines	Medium to high	Low to Medium
Surface and ground water contamination	Medium to High	Low to Medium
Destruction of natural vegetation and faunal habitat	Medium	Low to Medium
Interference with flora and fauna behavioural patterns	Medium to High	Low to Medium
Introduction of spread of alien and invasive vegetation	Medium to High	Low to Medium
Loss of hydrological functionality impacting on downstream habitats	Medium to High	Low to Medium
Impact on loss of wetlands	High	Medium
Socio Economic Environment		
Increase in ambient dust levels	Low to Medium	Low
Increase in ambient noise levels	Low to Medium	Low
Change of visual character	Medium	Low - Medium
Impact on traffic patterns within the area	Medium to High	Medium
Impacts on heritage resources	Low to Medium	Low
Temporary employment opportunities	**Medium Positive**	
Operational Phase		
Biophysical Environment		
Surface and ground water contamination	Low to Medium	Low
Soil contamination	Low to Medium	Low
Socio Economic Environment		
Increase in ambient noise levels	**Not significant**	
Permanent change of visual character	**Not significant**	
Permanent employment opportunities	**High Positive**	
Cumulative Impacts		
Increase traffic within the surrounding area	High	Low to Medium
Net loss of wetlands	High	Medium
Impact of Trade Zone 2 and other developments in the KSIA/DTP Precinct	High	Low to Medium
Loss of High Agricultural Potential Land	**Not significant**	
Increase in economic growth	**High positive**	

The DTP has been identified as a key development node in the north, and this is evident in the eThekwini Municipality's IDP, as well as the northern spatial development plan, as well as the Tongaat/DTP LAP. Furthermore, a development framework plan for the expansion of the site has been prepared and approved by the local authority. The further development of Trade Zone 2 is in line with this plan. The KSIA/DTP Development Precinct is a stimulator of economic growth in the Province and the expansion of the Airport is required to meet its future goals.

The negative impacts identified are not considered highly significant and with appropriate mitigation can be reduced to low or medium-low significance. The positive impacts are considerable in that the proposed

development will stimulate the local economy and provide additional employment opportunities greatly needed within the eThekwini Municipal area.

G-2 EAP'S RECOMMENDATIONS

Two layout alternatives have been presented in the Draft EIR i.e. Environmentally Preferred Layout and the Developer's Preferred Layout.

3) Environmentally Preferred Alternative:

- The Environmentally Preferred Layout allows for non-encroachment of infrastructure in the wetlands, drainage lines and their associated 30m buffer area. The watercourses on site must be rehabilitated to allow for the increased biodiversity on the site. This would also ensure that the hydrological flow patterns downstream of the site is not altered and the water courses are not polluted. This measure would be in line with the conditions of the KSIA Appeal Decision for the broader KSIA/DTP Development Precinct.
- This alternative is similar to the no-go alternative as there would be a reduced development footprint that would render the proposed TradeZone 2 development unviable for development, as there would be insufficient space for landuses such as General Aviation, Cargo Terminal and light industrial development.

4) Developer's Preferred Alternative:

- Should the Developer's preferred layout be approved, then all the wetlands on site will be infilled / lost to through development activities such as platforming and the construction of infrastructure on the site. This is however, in line with the original KSIA application as it was indicated that any rehabilitation of on-site wetlands will be temporary until such time as the Phase 2 of the development is implemented.
- To mitigate the loss of wetlands, the proponent intends to rehabilitate wetlands at a candidate offsite site. A candidate site has been identified that occurs north of the study area, within the same catchment as the study site i.e. Tongati River Catchment. In total, the wetlands within the study site represent 30.0 hectare equivalents of functional wetland area. To ensure a no-net-loss of wetland functional area from the local landscape, a gain of 30 ha-eq of wetland ecological integrity needs to be obtained through the successful rehabilitation of the candidate wetlands. Through successful wetland rehabilitation, the ecological integrity of the wetlands of the candidate site will be improved. This could potentially yield a gain of 49.4ha-eq.

Should the developer's preferred layout be adopted, the following recommendations are suggested:

- Should the Provincially Protected Plants be removed, relocated or destroyed as a result of the proposed development, a permit from the Provincial Department of Agriculture, Forestry and Fisheries (DAFF) must be sought and approved. It is recommended that the Provincially Protected Plants be relocated to the 'conservation area' adjacent to the northern boundary of the site.
- In view of the close proximity of the proposed development to the airport, it is recommended that the design of the buildings within the study area incorporate noise reduction principles to minimize noise impacts on the occupants. Therefore, residential development is not recommended as an alternative for the proposed development. Industrial development and associated aviation-related activities are compatible land-uses that will complement the adjacent KSIA and DTP.
- There are requirements for additional services infrastructure to be constructed that fall outside of the site boundary of the Trade Zone 2 development site. It is therefore suggested that the following proposed services infrastructure be finalised and approved the DEA:
    - Proposed 2.2Ml reservoir;
    - Tongaat/Hlawe Bulk sewer pipelines;
    - Stormwater attenuation ponds

- The long-term plan to construct a Link Road from Brake Drive to the New Spine Road must form part of a separate Environmental Application.
- The developer must provide high standard traffic warnings and traffic calming measures where construction activities interfere with traffic.
- The fuel storage areas at the General Aviation area must be clearly demarcated and restricted to designated staff only. The fuel storage area must be adequately bunded to ensure that no contamination of underground water and catchment areas occurs.
- The transport, handling and storage of hazardous substances must comply with all the provisions of the Hazardous Substances Act, 1973 (Act No. 15 of 1973), associated regulations as well as SANS 10228 and SANS 10089 codes.
- A Contingency Plan must be put into place in case of leakages or spillages which are not detected and then lead to the contamination of underground water. Leak detectors on pressure systems must be included.
- Monitoring of volumes of the tanks must take place on a daily basis to detect unexplained losses due to leakages.
- In the event of a spill, hazardous material may be generated. Such material must be disposed of at a suitably licensed waste disposal facility, with chain of custody documentation supplied as proof of end recipient.
- Hazardous and flammable substances must be stored and used in compliance with the applicable regulations and safety instructions.
- The 'conservation area' to the north of the site boundary must be clearly demarcated and there must be no encroachment of construction crew into this area. Stockpiles, construction vehicles and equipment, construction rubble etc, must not occur within the 'conservation area'. Prior to construction, the importance of the 'conservation area' and must be included in the Environmental Awareness Programme that the construction crew must be inducted on,
- The proposed development is in line with the local policies and guidelines such as the eThekwini Municipality's IDP, Northern Spatial Development Plan (NSDP), as well as the Tongaat/DTP Local Area Plan (LAP). Furthermore, a development framework plan for the expansion of the site has been prepared and approved by the local authority. The further development of the Trade Zone is in line with this plan.
- The proposed development will also contribute to local economic development and provide various employment opportunities to the local people with the eThekwini Municipality.
- In terms of agricultural activities and current land use, the impacts of the land use change is considered to be negligible on the surrounding areas.
- The site is generally stable and suitable for development, provided the recommendations as given in the Geotechnical Report are adhered to. It is recommended that a Geotechnical Engineer be appointed to inspect and approve all cut slopes, and cut and fill heights greater than 2m.

Having presented the two layout alternatives, the DEA is requested to approve the layout alternative that is based on the principles of sustainable development.

The applicant motivated for the Preferred Alternative by mitigating the infill of wetlands through the rehabilitation of wetlands at a candidate offset site. These wetlands have been identified as a National Ecosystem Priority Area and critical in terms of Ezemvelo Conservation Plan. Rehabilitation of the wetlands within the site may potentially improve the integrity of the wetlands to the extent that the number of hectare equivalents may be increased to 103.6ha. This is a potential gain of 49.4ha-eq, after a conservative estimate of the post-rehabilitation ecological state of the candidate wetlands.

This will appropriately achieve the no-net-loss functional area target, as well as provide leeway for any potential risk of failure of certain interventions.

The candidate site is considered appropriate and suitable for achieving both the wetland functioning target offset and the biodiversity target offset for the proposed development.

The DTP has been identified as a key development node in the north, and this is evident in the eThekwini Municipality's IDP, as well as the northern spatial development plan, and the Tongaat/DTP LAP. Should the proposed development not proceed with the Developer's Preferred Layout, there would be stifled growth, not only in the northern region of the Municipality but also in the Southern African region, since the airport's international status will be undermined. The Trade Zone 2 development forms part of the Greater KSIA/DTP Master Plan for growth of the Province, employment opportunities and the economy and the proposed infrastructure at TradeZone 2 would provide support to Phase 1 of the KSIA/DTP development. The proposed development's key role in the Dube Aerotropolis[9] development plans must be considered in the DEA's Environmental Decision.

A variety of mitigation measures have been identified that will serve to mitigate the scale, intensity, duration or significance of the impacts that have a low to medium, medium to high and high significance rating. These include guidelines to be applied during the construction and operational phases of the project. The EMPr (Appendix 7) contains more detailed mitigation measures.

To ensure that identified negative impacts are minimised and positive impacts enhanced, the following clauses are recommended as conditions of the Environmental Authorisation:

- The EMPr is a legally binding document and the mitigation measures stipulated within the document and EIR must be implemented.
- An independent Environmental Control Officer (ECO) must be appointed to manage the implementation of the EMP during the construction phase. Environmental Audit Reports must be compiled and made available for inspection.

[9] KSIA is a core piece of infrastructure with access to sea, road and rail linkages, within one of Southern Africa's strongest regional economies.
DTP development strategy will guide the development of the entire Airport City and create significant opportunities for all businesses in surrounding area (www.thdev.co.za/developments/aerotropolis/overview).
An Aerotropolis is a new layout of urban form comprising of aviation intensive businesses and related enterprises extending up to 25 kilometres outward from major airports (http//:en.wikipedia.org/wiki/Aerotropolis).

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SECTION I: APPENDICES

Appendix 1: Locality Map

Appendix 2: Photograph plate

Appendix 3: Site Development Plans and other Layout Plans

Appendix 4: Authority Correspondence

Appendix 5: Public Participation

Appendix 6: Specialist Studies

Appendix 7: Environmental Management Programme

37 Mona Street
Modelpark
Emalahleni, 1036
Mpumalanga, South Africa

PROPOSED EXPANSION OF CAPE WINELANDS AIRPORT – NOTICE OF PUBLIC PARTICIPATION PROCESS (COMMENTING PERIOD 24 JULY – 26 AUGUST 2024)

DEA&DP REF: 16/3/3/6/7/2/A5/20/2209/23 DWS REF: WU33620 – 23RD JULY 2024

MESSRS: PHS CONSULTING
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SUBJECT: COMMENTS REGARDING THE PROPOSED EIA AND EXPANSION OF CWA – CAPE WINELANDS AIRPORT

Hi Amanda,

We have been noticing with interest the establishment of a second airport in CT precinct having been through similar process with KSIA from about year 2000 to the official handover in 2010.

At the time I was working for Palace Consulting Engineers in Durban involved first with Moses Mabhida Stadium which was a challenge to design continuous power supply before being involved with Ilembe Consortium in the design, construction and final handover of KSIA.

Unfortunately, my involvement with KSIA and Dube Trade port was cut short due to expediency in completion of the Foskor Mining South Pit Project from 2008 – 2010 then with EML/EIS Zambia.

Suffice to say regarding KSIA it interesting that there was a pic of the then Ben Schoeman former transport minister around 1973 riding in his wheel chair on the old La Mercy runway which ran for 30 odd years serving microlights before the EIA process began in earnest. Myself, with Wally Meyer & June Viljoen commenced with petitioning for the new airport proposal around 2003 managing to get local Durban council approval around the same time so that the EIA could get underway. Actually, the biggest hurdle thereafter besides the famous barn swallow story was convincing ACSA. The cost and the move from Durban South to Durban North was prohibitive. However, through much local govt participation and the fact that the Reunion airport was confined between the Mondi channel in the north and Toyota Prospecton site in the south entailed a problem with any runway extension to handle large body aircraft.

Eventually the EIA process got underway around 2004-2005 while I worked for a company called Tank from CT selling cable accessories. Incidentally, all my colleagues at the time people from Siemens etc. categorially said the new airport will never happen? 30 years is a long time but once the “parts” fall into place it is just a matter of getting likeminded people to participate much like CWA? I attended a number of EIA sessions from La Mercy to Ballito to mt Edgecombe and recall one objection such as “aircraft noise pollution while playing golf? Eventually I think most of the people in the north welcomed the airport as not having so far to travel? The story of the barn

swallows were particularly interesting as these birds in their millions migrate between the UK and SA very year and the engineers used a radar system to detect their presence early in the mornings and late evenings when they roost in the Mt Moreland area south of the proposed runway. This was one of the last objections we addressed with technology which is interesting and is addressed later in my commentary.

INTRODUCTION

Around 2010 I completed my time at Foskor with the successful operation of south pit and overland conveyor – see my paper to SAEEC2011 attached around R630m later! I took up an appointment in Zambia and we successfully completed PFC – power factor correction installations for most of the country as Zesco imposed surcharges on poor power factor industries. We also built 2*50MW HFO Warsila power stations in Ndola to handle Zambia's power shortfall particularly as of now with El Nino – encountering one of the country worst drought phenomena. While addressing the power shortage myself with Zutari handled much of the COC – certificates of compliance following the successful EIA process of the Delta/Gulfstream project.

Anyway, long story short when I read of the pending CWA project, I had to make some contribution in the prospect of being involved with the project.

COMMENTARY

Having been through the EIA process for KSIA and Dube Trade Port I would like to offer the following:

1) I notice very limited airport diversification perhaps chicken farming and biodiversity?
2) Perhaps there is a need to diversify somewhat to counter the proximity of CTIA?
3) I am aware there is Atlantis EPZ is not too far away would not want to compete directly.
4) My thinking is considering unrelated items to include in the CWA project such as high valued agricultural goods such as wine, exotic fruits and produce with high technology process to market – something similar to the lessons learnt at KSIA – ULD's and Capespan PCL.
5) On another wicket consider IT related developments inclusive of training in IT Digital related technologies. Much like IT University – Belgium University campus in Tswane.
6) I believe these two situated not far from renowned universities of CT and Stellenbosch can also benefit from technological developments emanating from these institutions.
7) These opportunities should not result in too much land required and scares resources.
8) I have included some appendices on SEZ details and benefits for the stakeholders.
9) I believe it would be beneficial to add some more interest to the airport precinct and deviate from being solely in competition with CTIA.
10) Remember too the area I believe is much more conducive to CTIA in creating a people development area which the former is unable to achieve. That being its opportunity to rise!

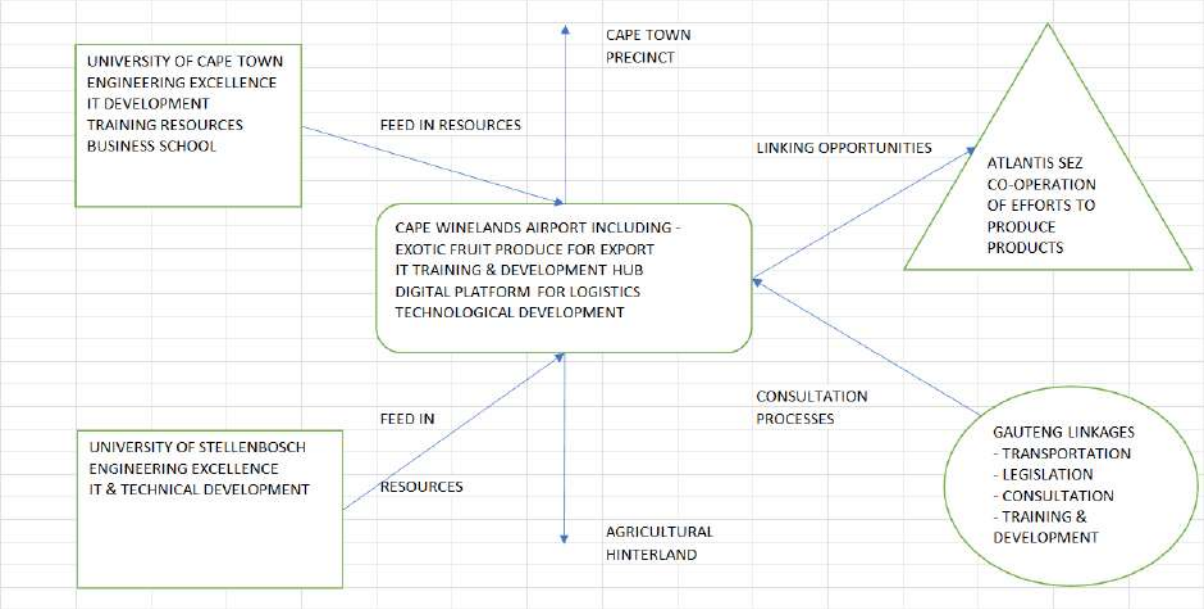
37 Mona Street
Modelpark
Emalahleni, 1036
Mpumalanga, South Africa

PROPOSAL

As per attached I have set up a new business around 2021/22 – Africana Engineering (Pty) Ltd with some like-minded colleagues now established in Zambia with all the project portfolios as per our co profile & website and am busy building an official residence in Knysna to be in close proximity to CT. By the way I spent most of my school days in CT then at UCT before progressing to Durban.

My goal now is move back into SA with the latest GNU as I believe now it the right time to move forward much like we did prior to the FWC 2010! Opportunity is now there and we have like-minded people in government to assist with the process of getting CWA and surrounding precinct off the ground! Remember us ex-pats made sure we had enough votes to make the changes!

PROPOSED BLOCK DIAGRAM OF OPERATIONAL LINKAGES



CONCLUSION

We are prepared to offer our service to explore and make contact with the relevant authorities within CWA Aero and other corporate bodies to investigate and appoint people to establish or position the company in reaching its near term to long term objectives to make CWA a success.

Should you or CWA Aero require our service we will make them available for you so we can explore and appoint the right people to make these issues listed above a reality.

Look forward to your positive response!

Guy Gibbon Pr Eng MBL
CEO Africana Engineering (Pty) Ltd

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South Africa

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Zambia
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Roma
Lusaka
Zambia

+260 96 361 0913

Company Profile

success
through
experience

AE – Africana Engineering was inaugurated in 2020/21 as a BEE offshoot from AfmetCC to tackle as the name suggests the gap between industry/ commercial installations having a shortfall in power quality as a result of these not meeting the requirements of new generation technology and AI cloud-based systems to provide the customers with a satisfactory solution to their inherent power issues more particularly with the supply authorities in the SADC region.

AFRICANA ENGINEERING

success through experience

Content

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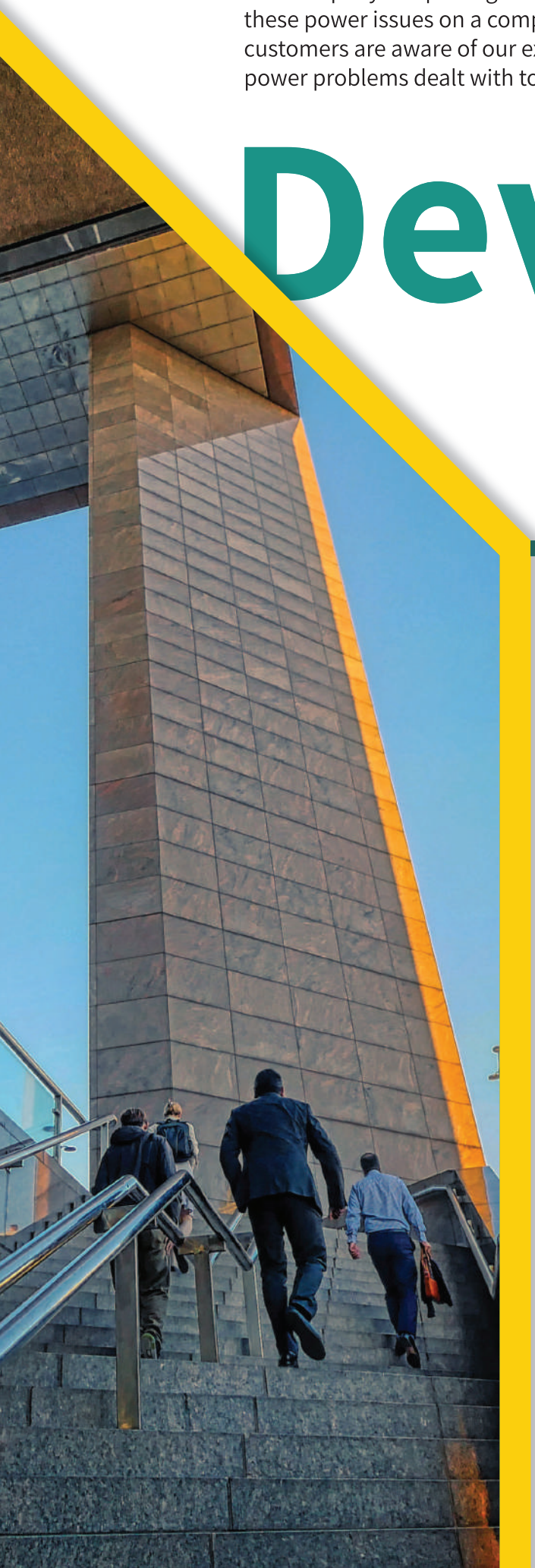
Flow diagrams of remote monitoring	14

The company has put together a team of experienced personnel – experts to tackle these power issues on a comprehensive basis over a period to the extent that customers are aware of our expertise and post requests to have their respective power problems dealt with to streamline and reduce their power costs.



Develop-ment

The company is now well established in the Zambian region and is in the process of expanding into other SADC areas such as Zimbabwe and South Africa with new enquiries from these regions.

Having established a footprint in the power factor correction market this strength is proposed to provide a similar presence in other regions due to the network of suppliers available as well as in house development of expertise in the field.

Remote monitoring is also applicable for all critical items of equipment including gensets, refrigeration and irrigation as displayed in the polar monitoring, electro mechanica catalogues.

Personally, we are also embarking into new areas of expertise such as solar, batteries and smart homes. These are obvious options as most people are considering going off grid and want their homes enterprises to reflect the same expertise and convenience of non-reliance on the present status quo.

Growth has been steady for the last while and we can safely say we have now established a foothold in the markets described above and will continue to exploit our options to build up the company.

Projects

Projects include customer power issues and monitoring of plant and equipment so that the customer is able to know that problems with the supply authority and continuity of supply is maintained.

1. APG Mills Lusaka Zambia
2. NWG Mill Livingstone Zambia
3. Choma Milling Choma Zambia
4. Quality Commodities Lusaka Zambia
5. EFE Royal Milling Luanshya Zambia
6. Bwino Milling Kitwe Zambia
7. Novatek Feeds Lusaka Zambia
8. Alpha Polycast Plastic Processing plant Ndola Zambia
9. Simba Milling Lusaka Zambia

Prospective:

- Malting Plant Lusaka Zambia
- FVG Milling Kabwe Zambia
- Zambezi Paper Mills Ndola Zambia
- NFL Food Processing Plant Lusaka Zambia
- Zim Milling Plant Harare Zimbabwe
- RE Groundnuts Viljoenskroon SA

Development:

- Power factor correction systems
- Stand by supply systems
- Variable speed drives
- Remote monitoring
- Report writing and COC certificate of compliance

Project / Client Inventory

SOCIETY BUSINESS PARK/HILTON HOTEL COMPLEX LUSAKA ZAMBIA

POWER ANALYSIS FOR SOCIETY BUSINESS PARK FOR THE CHILLER PLANT – POWER FACTOR PANEL CAPACITY - 725KVAR

FOSKOR MINE PHALABORWA SOUTH AFRICA

NEW SOUTH PIT MINE DEVELOPMENT INCLUDING CONVEYORS, CRUSHER & SUBSTATIONS

HANDY MAN'S LIME PLANT NDOLA ZAMBIA

NEW BUILD AND PROVISION OF POWER FACTOR CORRECTION PANELS

11KV POWER FACTOR CORRECTION AT NDOLA LIME PLANT NDOLA ZAMBIA

HIGH VOLTAGE 3MVAR POWER FACTOR CORRECTION SYSTEM

JOINT MINING LUSAKA ZAMBIA

PLACEMENT OF NEW POWER FACTOR PANEL TO ATTEND TO POWER QUALITY ISSUES AT THE MINE

CONTINUE....

NEW MALTING PLANT AT LSMFEZ LUSAKA ZAMBIA

PROVISION OF ELECTRIC SUPPLY AND REHABILITATION OF POWER FACTOR CORRECTION SYSTEM

NOVATEK NEW MPONGWE MILL MPONGWE ZAMBIA

PROVISION OF POWER FACTOR CORRECTION SYSTEM 1000KVAR FOR THE NEW MILL

NANGA FARMS MAZUBUKA ZAMBIA

PROVISION OF POWER FACTOR CORRECTION SYSTEMS FOR ALL THE PUMP STATIONS ZAM SUGAR

NDOLA 50MW HFO POWER PLANT

INSTALLATION OF THE LOW POWER PANELS FOR THE GENERATION SETS FOR WARTSILA

NEW LIMECO PLANT LUSAKA ZAMBIA

PROVISION OF POWER PANELS AND POWER FACTOR CORRECTION

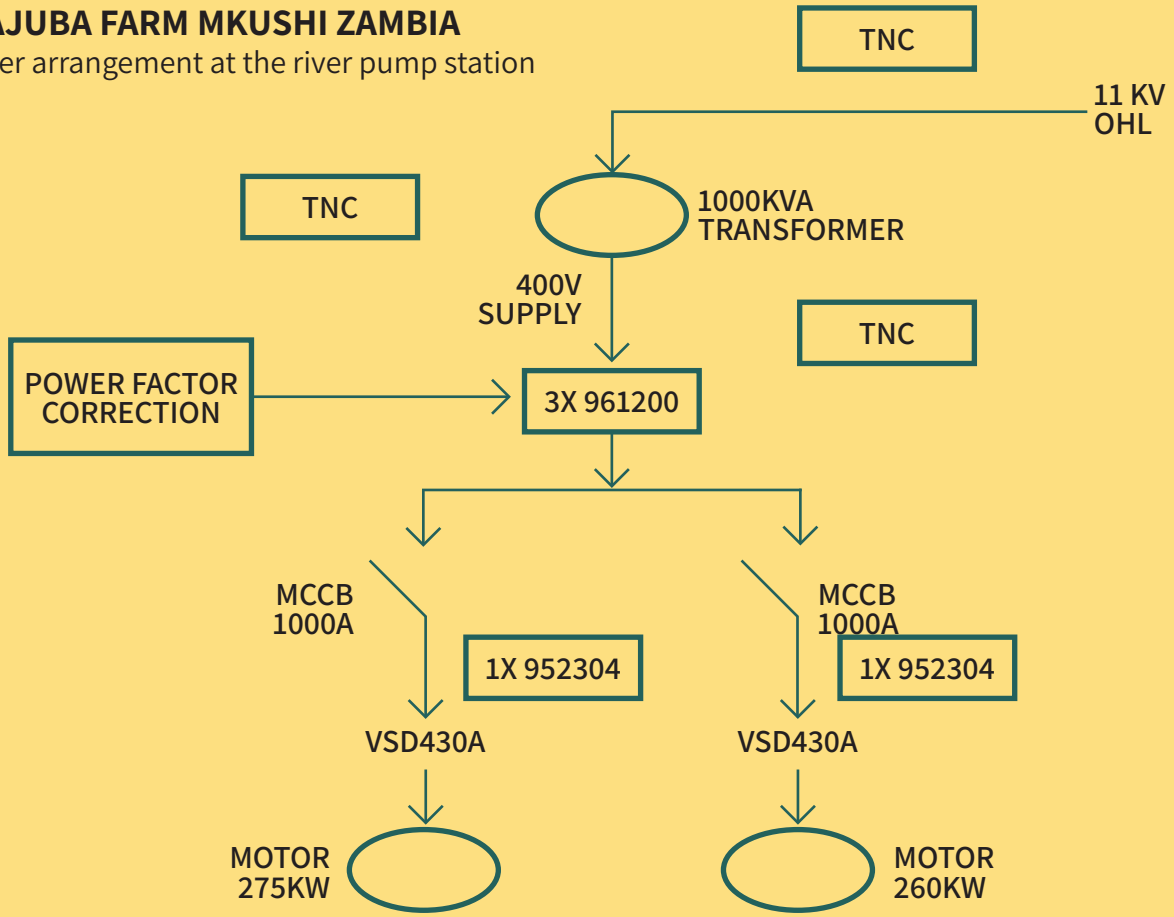
NEW DANGOTE CEMENT PLANT NDOLA ZAMBIA

POWER SUPPLY RETICULATION, POWER FACTOR CORRECTION AND SOFT STARTERS

PROPOSALS/SINGLE LINE DIAGRAMS

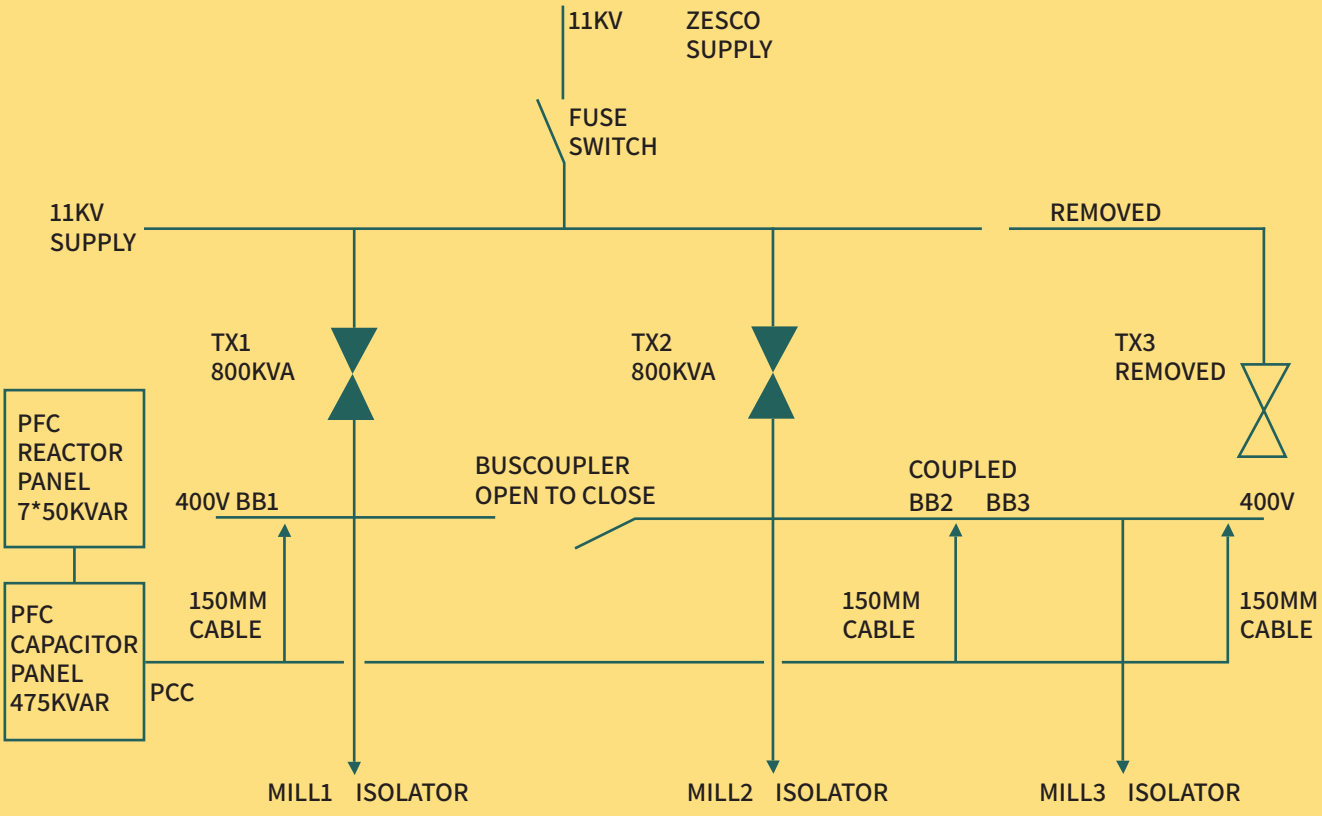
AMAJUBA FARM MKUSHI ZAMBIA

Feeder arrangement at the river pump station



CHOMA MILLING CHOMA ZAMBIA

Choma SLD to resolve harmonic/panel sharing problem

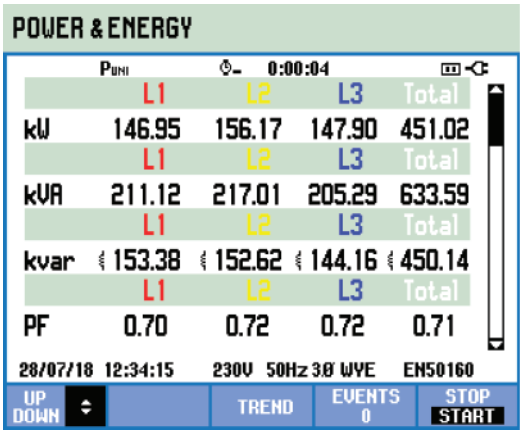


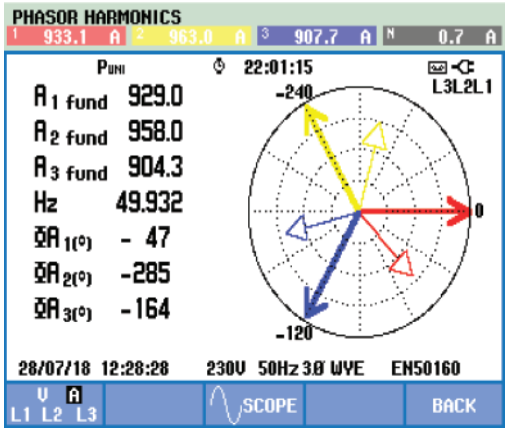
POWER ANALYSIS FLUKE 437II

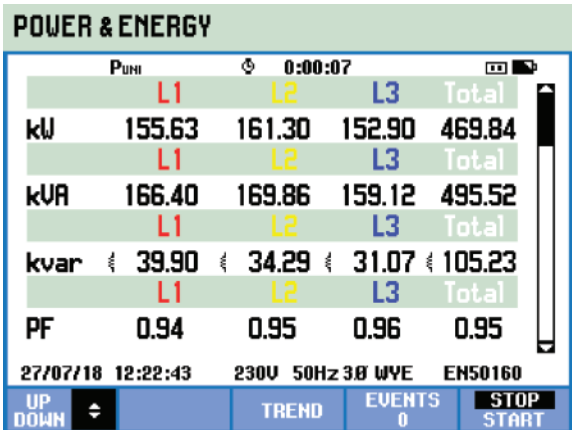
RESULTS OF DOWNLOADS AND POWER FACTOR ANALYSIS

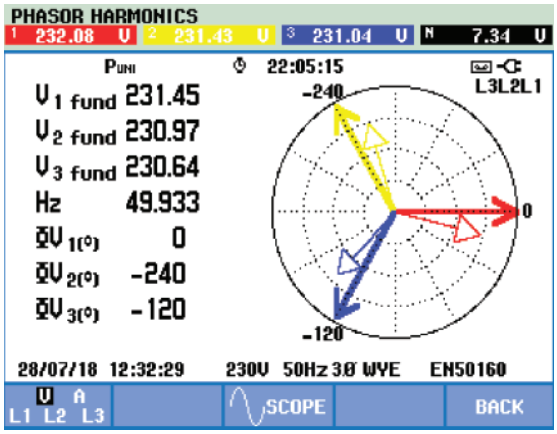
ZAMMS MILLING COMPANY LUSAKA ZAMBIA

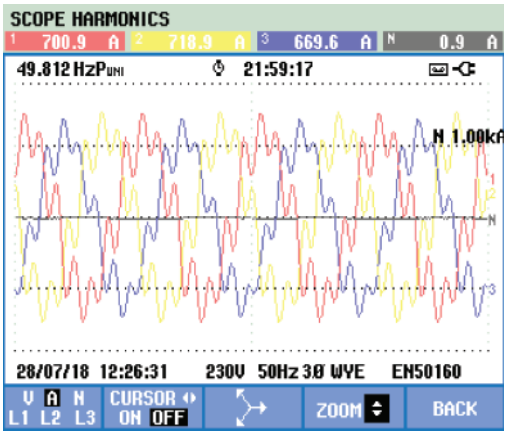
Below results show the benefits of power factor correction with reactor harmonic compensation

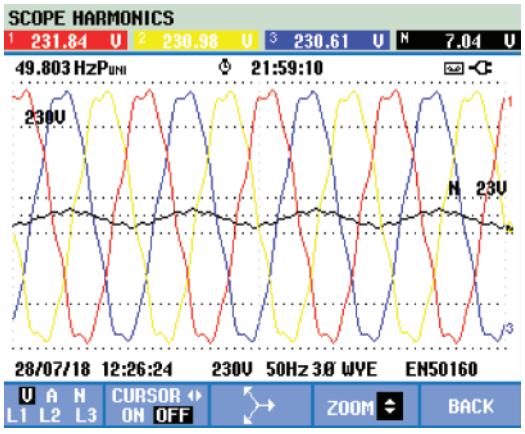


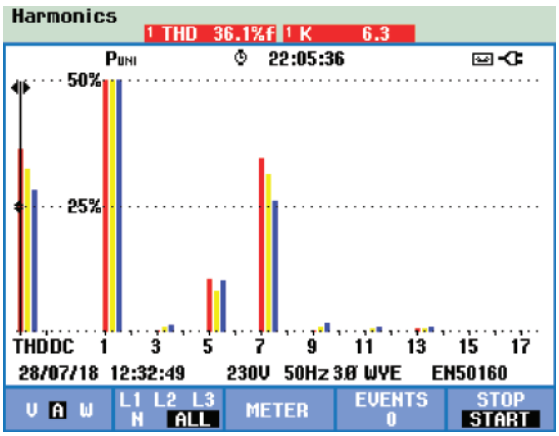


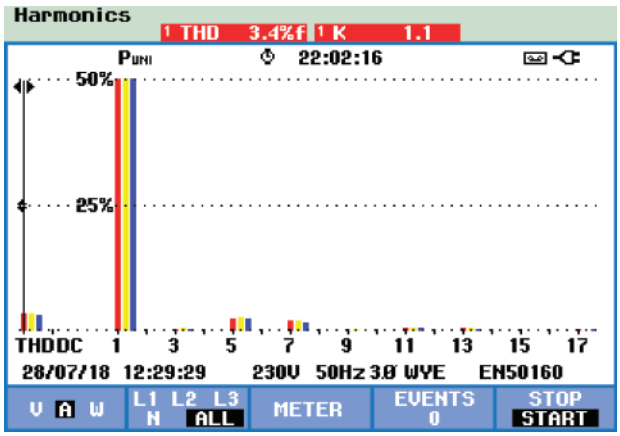






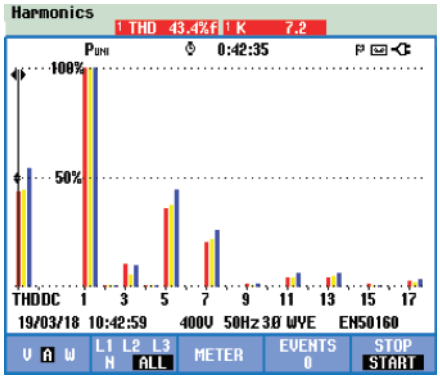


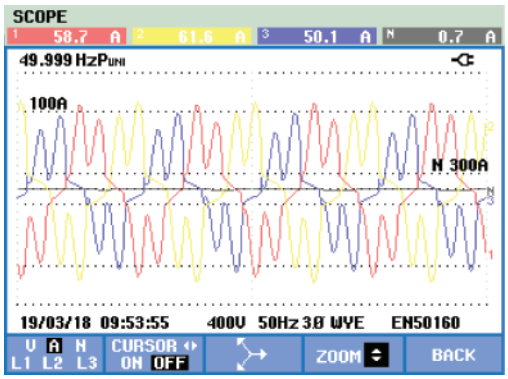


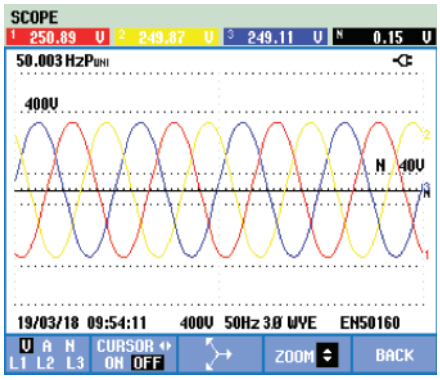


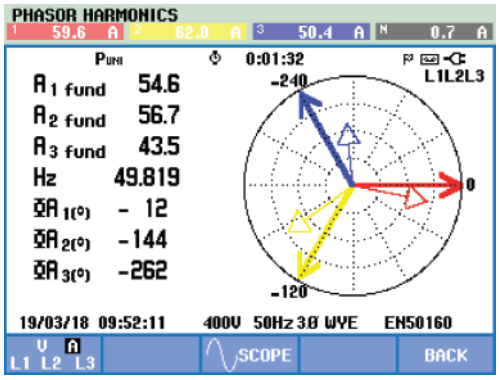
SOCIETY BUSINESS PARK INCORPORATING THE HILTON HOTEL LUSAKA ZAMBIA

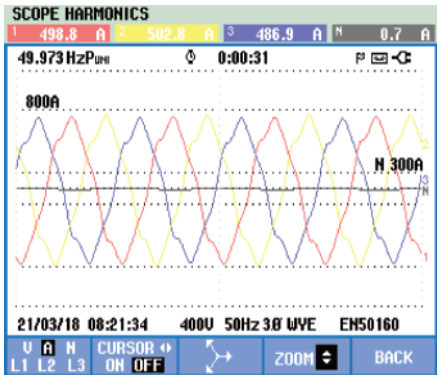
Below shows the benefits of power factor correction without reactor harmonic compensation

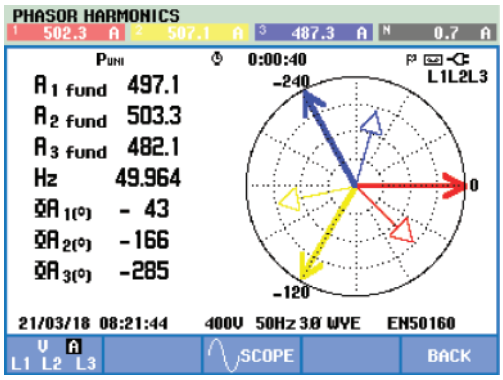


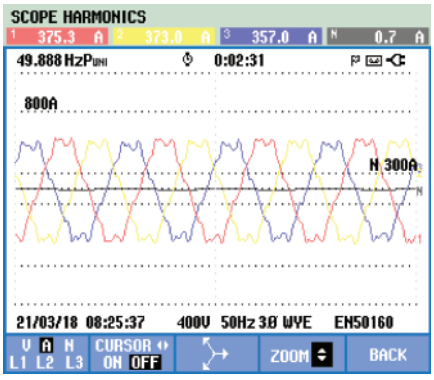


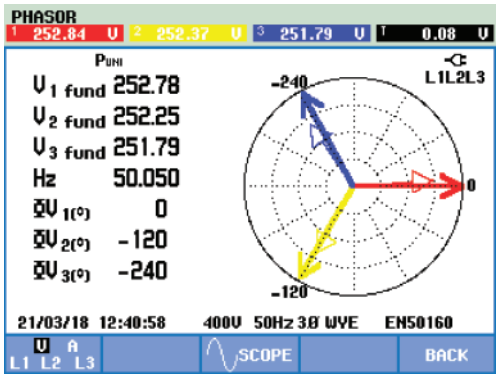


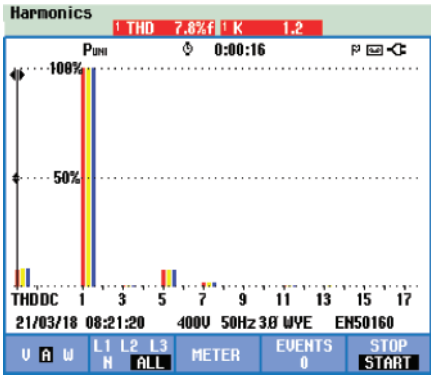


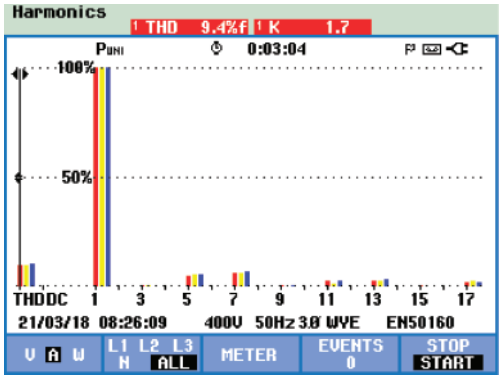








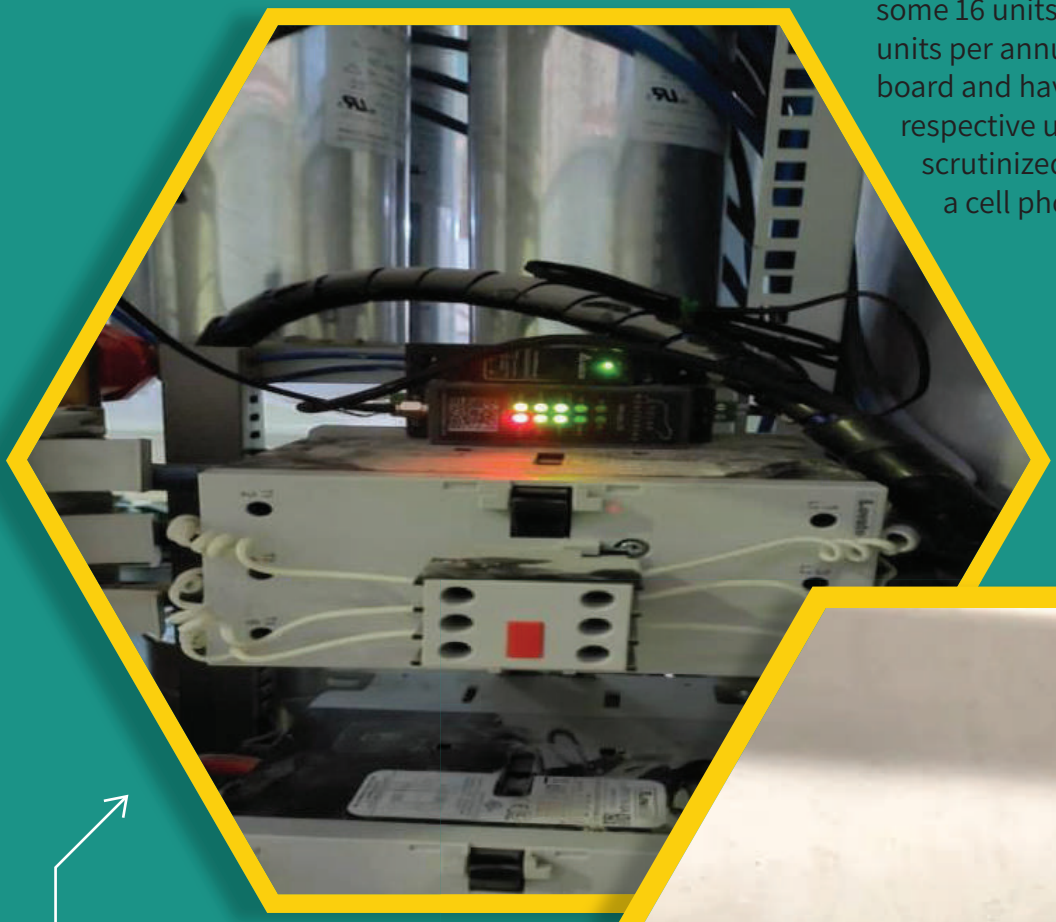




Remote Monitoring

A new feature developed by the company in association with EM/PM is the simple remote monitoring application which enables units all over the SADC region to be monitored 24/7 to ensure that the installed equipment is performing as it was designed to do.

The company has installed to date some 16 units and aims to introduce 50 units per annum as the clients come on board and have the satisfaction of their respective utilities being continually scrutinized anywhere where there is a cell phone network.



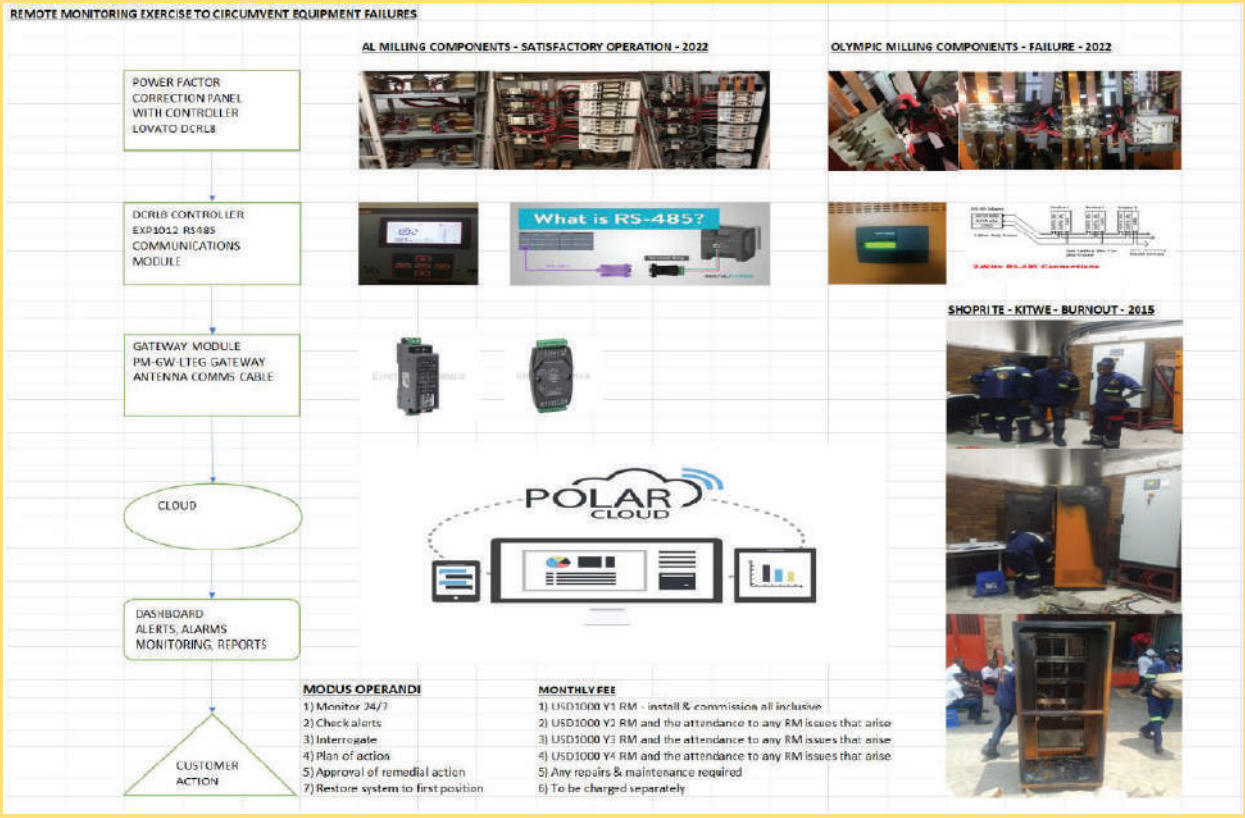
THE FIRST REMOTE MONITORING UNIT BEING INSTALLED AT A1 MILLING IN JULY 2022

GATEWAY ACTIVATED TO CELLPHONE NETWORK THEN ONTO THE CLOUD FOR SCRUTINY

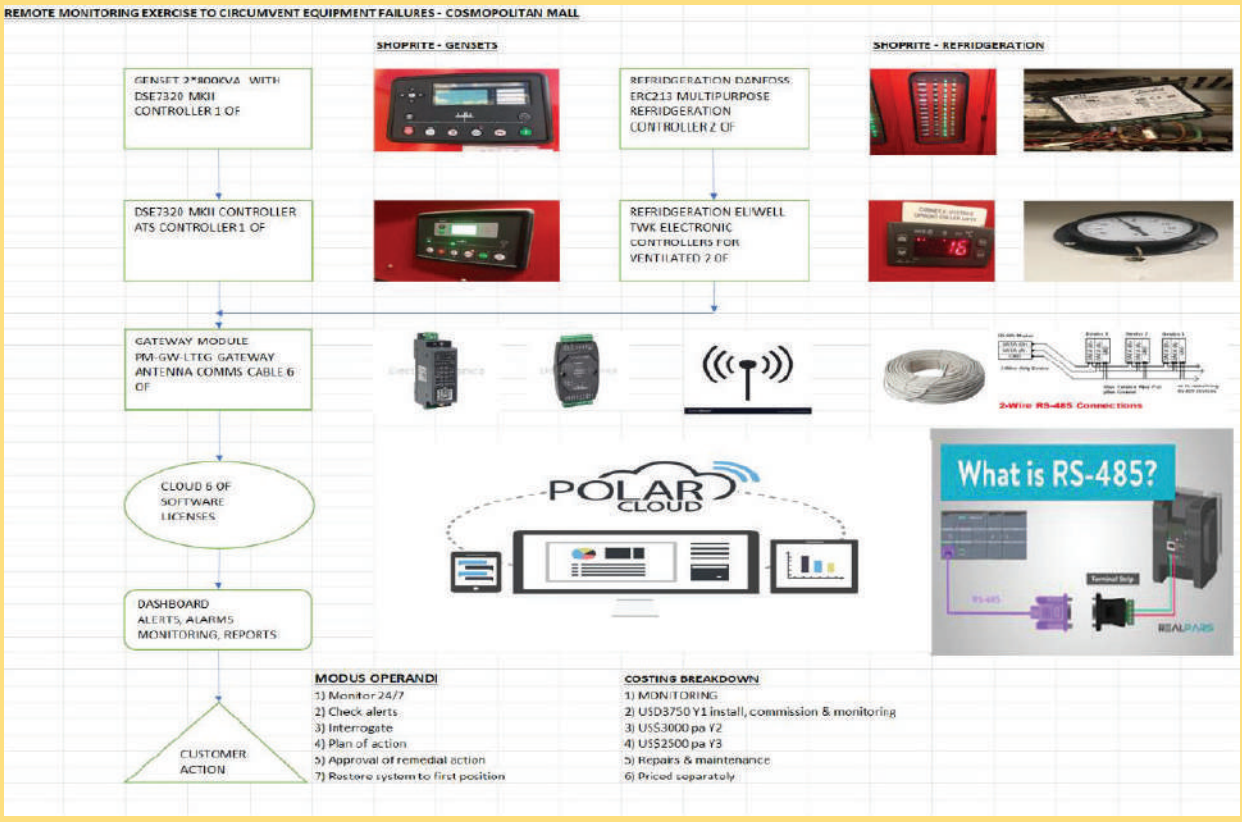
PRINCIPLE OF RM OPERATION – ALL THE CRITICAL PARAMETERS ARE TRANSMITTED FROM THE PFC CONTROLLER TO THE GATEWAY AND THEN ONTO THE CLOUD VIA THE CELLPHONE NETWORK

FLOW DIAGRAM TO SHOW HOW THE HARDWARE IS INTERCONNECTED FOR REMOTE MONITORING

FLOW CHART OF OPERATIONS FOR POWER FACTOR CORRECTION APPLICATIONS



FLOW CHART OF OPERATIONS FOR SHOPRITE COSMOPOLITAN MALL LUSAKA ZAMBIA



1000KVAR POWER FACTOR CORRECTION PANEL FOR QUALITY COMMODITIES WITH HARMONIC REACTOR COMPENSATION

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info@africanaengineering.co.za • [redacted]
WhatsApp: [redacted]

BILLTRADE 104 (Pty) Ltd

REGISTRATION No. 2006/028037/07

LAND USE, RE-ZONING AND ENVIRONMENTAL APPLICATIONS

Portion 2 (portion of portion 1) of Farm 123, Cape, Western Cape Province

I/We, the undersigned, being the Director/s of the Company, hereby resolve: -

That JOHAN MOMSEN SMIT (ID 590216 5135 080) be, and is hereby, authorised to sign any and all such documents required for the re-zoning, land use and any environmental application process regarding the Property as well as any other documents required by the City of Cape Town or any other relevant authority for the submissions of the relevant applications and the acceptance of the conditions of approval pertaining to such applications.

DIRECTOR	SIGNATURE	DATE
Mr PR Eksteen ID: 6407035028084	.....	19 October 2018

BUNKER HILLS INVESTMENTS 311 (Pty) Ltd

REGISTRATION No. 2000/002622/07 (the Company)

LAND USE, RE-ZONING AND ENVIRONMENTAL APPLICATIONS

Remainder of Farm 123, Cape, Western Cape Province (the Property)

I/We, the undersigned, being the Director/s of the Company, hereby resolve: -

That JOHAN MOMSEN SMIT (ID 590216 5135 080) be, and is hereby, authorised to sign any and all such documents required for the re-zoning, land use and any environmental application process regarding the Property as well as any other documents required by the City of Cape Town or any other relevant authority for the submissions of the relevant applications and the acceptance of the conditions of approval pertaining to such applications.

DIRECTOR	SIGNATURE	DATE
Mr PR Eksteen ID: 6407035180084	.....	19 October 2018

SAGE WISE 67 (Pty) Ltd or Nominee

REGISTRATION No. 2003/019587/07 (the Company)

WINELANDS AIRPORT ON PORTION 10 AND 23 OF FARM 724, PORTION 7 OF FARM 942, REMAINDER, PORTION 3 AND 4 OF FARM 474

I/We, the undersigned, being the Director/s of the Company, herby resolve:-

That JOHAN MOMSEN SMIT (ID 590216 5135 080) be, and is hereby, authorised to sign any and all such documents required for the comment on the above mentioned application process as well as any other documents required for Council or any other authority submissions in this regard.

DIRECTOR	SIGNATURE	DATE
Dr JM Smit	.....	07 December 2023

POWER OF ATTORNEY

(REGISTERED OWNER'S CONSENT FORM)

I, JOHAN MOMSEN SMIT (ID 590216 5135 080) SAGE WISE 67 (Pty) Ltd,

Duly authorised as per the attached resolutions,

wish to certify that authority is hereby granted to:

Elco Property Developments – Karla Burger

To submit comment on our behalf to the proposed development on PORTION 10 AND 23 OF FARM 724, PORTION 7 OF FARM 942, REMAINDER, PORTION 3 AND 4 OF FARM 474 .

The undersigned therefore nominates, constitutes and appoints the above applicant with the power of substitution to be the registered owner's legal representative / agent and to act in the name, place and stead of the registered owner in the above regard. Power of attorney is accordingly hereby granted to the applicant to sign all correspondence in respect of the matter referred to above.

Owner's signature:

Date: 26 August 2024

BILLTRADE 104 (Pty) Ltd

REGISTRATION No. 2006/028037/07

WINELANDS AIRPORT ON PORTION 10 AND 23 OF FARM 724, PORTION 7 OF FARM 942, REMAINDER, PORTION 3 AND 4 OF FARM 474

I/We, the undersigned, being the Director/s of the Company, herby resolve:-

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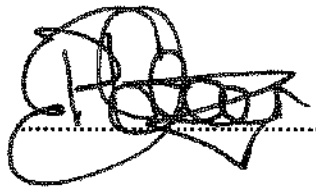
DIRECTOR	SIGNATURE	DATE
Mr PR Eksteen		8/10/24 2024
ID: 6407035028084		

BUNKER HILLS INVESTMENTS 311 (Pty) Ltd

REGISTRATION No. 2000/002622/07 (the Company)

WINELANDS AIRPORT ON PORTION 10 AND 23 OF FARM 724, PORTION 7 OF FARM 942, REMAINDER, PORTION 3 AND 4 OF FARM 474

I/We, the undersigned, being the Director/s of the Company, herby resolve:-

That JOHAN MOMSEN SMIT (ID 590216 5135 080) be, and is hereby, authorised to sign any and all such documents required for the comment on the above mentioned application process as well as any other documents required for Council or any other authority submissions in this regard.

DIRECTOR	SIGNATURE	DATE
Mr PR Eksteen	.....	8/10/24 2024
ID: 6407035028084		

RICHARD SUMMERS INC.
ATTORNEYS

Garden Cities NPC (RF)
Attention: Renier Smith

Our ref: RNR21-002

Per email: [redacted]

26 August 2024

Dear Mr Smith

***RE*: GREENVILLE GARDEN CITY, EXISTING LAND RIGHTS CONFIRMATION AND EIA PROCESSES / CONSIDERATION**

1. We refer to the above matter.

2. More than 17 years have lapsed since Garden Cities commenced with the development approval processes. In this regard, Garden Cities undertook a detailed planning process to obtain the numerous development rights necessary in order to develop the Greenville Garden City, including subdivision and rezoning of the property (including amending the urban edge and the approval of the Conceptual Land Use and Phasing Plan (referred to as the "Concept Plan")), as well as obtaining Environmental Authorisation in terms of the National Environmental Management Act ("NEMA").

3. Due to the scale of the Greenville Garden City development, a phased approach was adopted and approved by the City of Cape Town to inform, facilitate and guide the planning methodology and required statutory processes. To this end, the phased approach of negotiation, planning and approvals was considered appropriate to provide a mechanism to plan and manage the development of large / strategic urban development areas, such as the Greenville Garden City development.

4. The submission and approval of the Concept Plan was the first component of the phased approach as the Plan outlined the overall development principles and structuring elements.

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57 Prestwich Street
De Waterkant, 8002
Cape Town

M: [redacted]
E: [redacted]

Further, the approval of the Concept Plan forms the basis (and thereby guides) further applications and plans which are to be submitted to the City for further subdivision / rezoning / site development / building plans for the remainder of the phases contemplated in the Concept Plan.

5. The entire Greenville Garden City development as depicted in the Concept Plan approved by the City (and as approved by the Department of Environmental Affairs and Development Planning in terms of NEMA) will include a range of housing opportunities, with 16 500 residential units being proposed over the 6 phases. Employment opportunities will be generated through the commercial, office, retail and industrial zones as well as educational facilities and other public facilities.

6. Having regard to the above, the proposed Project will have an adverse socio-economic impact on the Greenville Garden City development and the land use rights acquired by Garden Cities. It is precisely this type situation that the Court in the *Fuel Retailers*[1] case sought to avoid, remarking that a legitimate object of the EIA process is to identify and predict the actual or potential impact on socio-economic conditions.[2] The *Fuel Retailers* case is particularly relevant as the Court held that the impact of a proposed development on the feasibility of other developments is required to be carefully assessed during the EIA process. This has not been done. The impact on the feasibility of the Greenville Garden City development has not been evaluated, considered or assessed.

7. There is a legal obligation on the competent authority to have regard to issues such as the impact on the Greenville Garden City development because it gives rise to potential adverse socio-economic impacts. A legitimate concern is established where the failure to investigate potential adverse socio-economic impacts and to avoid adverse economic impacts, would give rise to adverse socio-economic consequences for the potential adverse socio-economic impacts. At this stage, the impact of a proposed Project on the feasibility of the Greenville Garden City development has not been carefully assessed during the EIA process.

[1] *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others* 2007 (6) SA 4 (CC).
[2] *Fuel Retailers*, at paragraph 80.

8. In addition to the above, the need for and desirability of the proposed Project must be specifically and explicitly assessed in the EIA process insofar as it relates to both the individual and cumulative impacts of the proposed Project. An integral aspect in determining the need for and desirability of the proposed Project requires an assessment of the impacts posed to the existing land use rights held by Garden Cities for the Greenville Garden City development.

9. The Guideline on Need and Desirability, 2014 aids in determining whether the proposed Project contributes to or detracts from the sustainability of surrounding developments. In this regard we note the following:

9.1. The proposed Project does not compliment the future use of the surrounding area, i.e. the future phases of the Greenville Garden City development[3];

9.2. The proposed Project is not in-line with the general planning for the area as (1) approved by the City in terms of the Concept Plan and (2) approved by the Department of Environmental Affairs and Development Planning in terms of the environmental authorisation issued under NEMA which forms the basis of the land use rights held by Garden Cities[4];

9.3. The proposed Project does not encourage socio-economically sustainable land development practices and processes when considered alongside the land use rights held by Garden Cities[5];

9.4. The proposed Project will not result in the equitable distribution of impacts in the long-term as the proposed Project will disproportionately impact those that will live in homes to be constructed in the planned (future) phases of the Greenville Garden City development[6];

9.5. The size, scale, scope and nature of the proposed Project in relation to its location and other planned developments in the area (specifically the Greenville Garden City development) results in a development that will not contribute to social and economically sustainable development in the short and long term. This is largely due to the impacts of the proposed Project on the feasibility of the Greenville Garden City development which consists of a

[3] Section 2.5.4 of the Guideline on Need and Desirability, 2014, read with section 3 of the Development Facilitation Act, 1995 (Act No. 67 of 1995).
[4] Section 2.5.5 of the Guideline on Need and Desirability, 2014, read with section 3 of the Development Facilitation Act, 1995 (Act No. 67 of 1995).
[5] Section 2.5.11 of the Guideline on Need and Desirability, 2014.
[6] Sections 2(2) and 2(4)(c) of NEMA as well as section 2.4 of the Guideline on Need and Desirability.

mixture of low-, middle- and high-income housing opportunities[7]. In this regard, a large portion of the Greenville Garden City development caters for Reconstruction and Development Programme housing.

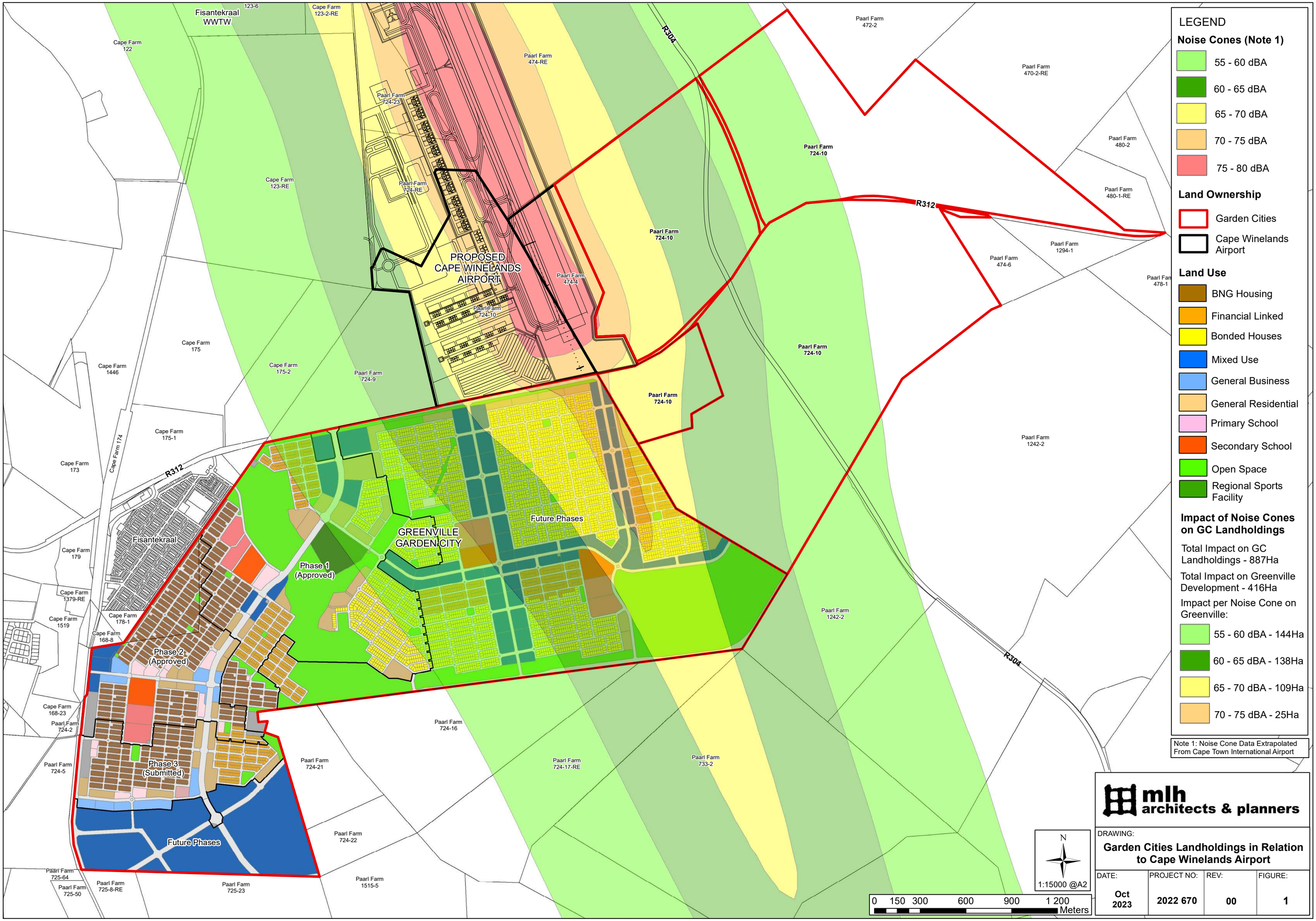
10. Based on the information in the EIA process for the proposed Project, there is no basis to suggest that the mitigations proposed will be a failsafe mechanism for protecting the viability of the Greenville Garden City development. There is insufficient information in the EIA process to guarantee that anticipated impacts will be avoided and/or mitigated. In the absence of relevant information, the competent authority should adopt a more cautious approach.

Yours faithfully,

RICHARD SUMMERS INC

R W SUMMERS

[7] Section 2.22 of the Guideline on Need and Desirability, 2014.



mlh architects & planners

DRAWING:

Garden Cities Landholdings in Relation to Cape Winelands Airport

DATE:	PROJECT NO:	REV:	FIGURE:
Oct 2023	2022 670	00	1

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4.2 Typical noise in various districts

4.2.1 General

Typical rating levels ($L_{Req,T}$) for ambient noise in different districts are given in table 2.

4.2.2 Outdoors

The values given in columns 2 to 4 of table 2 are typical rating levels that should not be exceeded outdoors in the different districts given in column 1. Outdoor ambient noise exceeding these levels will be considered to be annoying to the community (see 4.5.4).

The levels given in columns 2 to 4 of table 2 may be used as a guide for zoning purposes.

4.2.3 Indoors

The values given in columns 5 to 7 of table 2, based on the assumption that a building with natural ventilation and open windows will provide sound insulation of about 10 dBA, are the typical levels that should not be exceeded indoors in the different districts given in column 1. (See table 1 for maximum rating levels for ambient noise inside buildings.)

NOTE 1 Where occupancies have to be allowed within areas where the acceptable outdoor values in table 2 are exceeded for the particular type of occupancy, the sound insulation of the building housing the occupancy should be proven to be such that the indoor values given in table 2 for the particular type of occupancy are not exceeded.

NOTE 2 Where the noise contains predominantly low frequency components, the indoor values may not be any lower than the outdoor values and may even be accentuated due to room resonances in the building. Conventional sound insulation of the building can not resolve this problem.

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Table 2 — Typical rating levels for noise in districts

1	2	3	4	5	6	7
Type of district	**Equivalent continuous rating level ($L_{Req.T}$) for noise** dBA					
	Outdoors			**Indoors, with open windows**		
	Day/night $L_{R,dn}$[a]	**Daytime $L_{Req,d}$**[b]	**Night-time $L_{Req,n}$**[b]	**Day/night $L_{R,dn}$**[a]	**Daytime $L_{Req,d}$**[b]	**Night-time $L_{Req,n}$**[b]
a) Rural districts	45	45	35	35	35	25
b) Suburban districts with little road traffic	50	50	40	40	40	30
c) Urban districts	55	55	45	45	45	35
d) Urban districts with one or more of the following: workshops; business premises; and main roads	60	60	50	50	50	40
e) Central business districts	65	65	55	55	55	45
f) Industrial districts	70	70	60	60	60	50

NOTE 1 If the measurement or calculation time interval is considerably shorter than the reference time intervals, significant deviations from the values given in the table might result.

NOTE 2 If the spectrum of the sound contains significant low frequency components, or when an unbalanced spectrum towards the low frequencies is suspected, special precautions should be taken, and specialist advice should be obtained. In this case the indoor sound levels might significantly differ from the values given in columns 5 to 7. (See also annex B.)

NOTE 3 In districts where outdoor $L_{R,dn}$ exceeds 55 dBA, residential buildings (e.g. dormitories, hotel accommodation and residences) should preferably be treated acoustically to obtain indoor $L_{Req,T}$ values in line with those given in table 1.

NOTE 4 For industrial districts, the $L_{R,dn}$ concept does not necessarily hold. For industries legitimately operating in an industrial district during the entire 24 h day/night cycle, $L_{Req,d} = L_{Req,n} = 70$ dBA can be considered as typical and normal.

NOTE 5 The values given in columns 2 and 5 in this table are equivalent continuous rating levels and include corrections for tonal character, impulsiveness of the noise and the time of day.

NOTE 6 The noise from individual noise sources produced, or caused to be produced, by humans within natural quiet spaces such as national parks, wilderness areas and bird sanctuaries, should not exceed a maximum A-weighted sound pressure level of 50 dBA at a distance of 15 m from each individual source.

a The values given in columns 2 and 5 are equivalent continuous rating levels and include corrections for tonal character and impulsiveness of the noise and the time of day.

b The values given in columns 3, 4, 6 and 7 are equivalent continuous rating levels and include corrections for tonal character and impulsiveness.

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