EXECUTIVE SUMMARY: *FINAL* ENVIRONMENTAL IMPACT REPORT CAPE TOWN INTERNATIONAL AIRPORT RUNWAY RE-ALIGNMENT AND ASSOCIATED INFRASTRUCTURE

NEAS Reference Number: DEA/EIA/0001606/2012

DEA Reference Number: 14/12/16/3/3/2/446

1 INTRODUCTION

Cape Town International Airport, one of three international airports in South Africa, currently comprises two active runways: the primary runway (Runway 01-19) and a secondary runway (Runway 16-34) bisecting it (Figure 1).

Airports Company South Africa proposes to re-align the primary runway and construct parallel and rapid exit taxiways. The re-aligned primary runway (Runway 18-36) will be 3 500 m in length and will be built to international specifications, allowing larger (Code F) aircraft to land at Cape Town International Airport, enabling airport expansion and increased airport capacity. Re-aligning the runway will alleviate current development constraints, and will allow for more efficient future expansion of the airport.

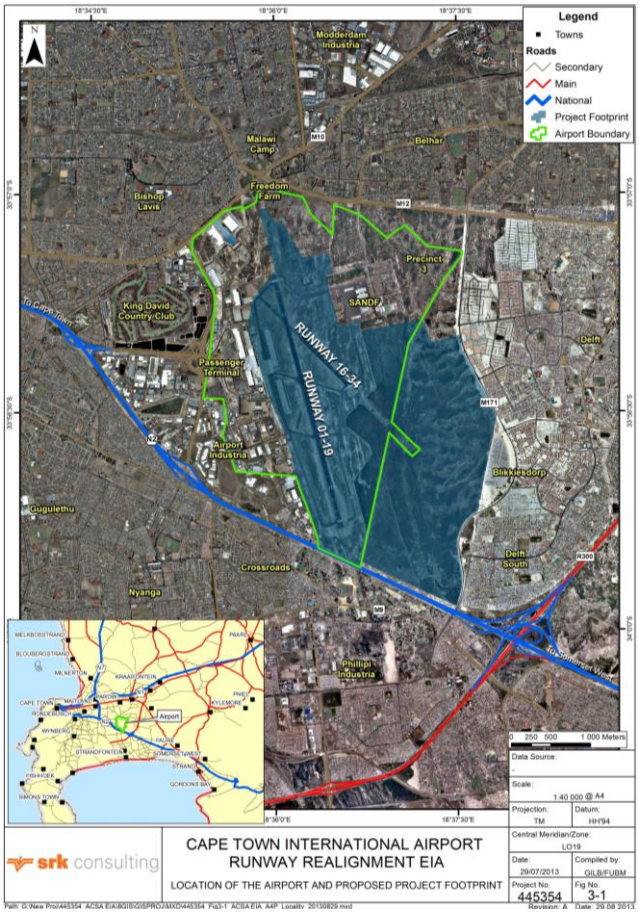

Figure 1: Locality Plan

SRK Consulting (South Africa) (Pty) Ltd (SRK) has been appointed by Airports Company South Africa to undertake the Scoping and Environmental Impact Reporting (S&EIR, also referred to as Environmental Impact Assessment [EIA]) process required in terms of the National Environmental Management Act 107 of 1998, as amended (NEMA). SRK has appointed a qualified team of Environmental Assessment Practitioners (EAPs) to manage this process.

The Scope of Work (*SoW*) assessed in the EIA process includes:

- Re-alignment of the primary runway;
- Construction of associated airport infrastructure (e.g. taxiways);
- Bulk earthworks proposed to the east of the airport;
- Increased capacity potential provided for by the development in terms of number and/or frequency of flights and new flight paths facilitated by the development; and
- Associated increase in (external) public road traffic to service increased passenger numbers.

See page 8 for details on how you can participate in the process.

2 GOVERNANCE AND PLANNING FRAMEWORK

Sections 24 and 44 of NEMA make provision for the identification of activities which may not commence without an Environmental Authorisation (EA), and stipulate the requirements for the assessment of such activities. The EIA Regulations, 2010, are contained in four Government Notices (GN) issued in terms of NEMA. GN R543 sets out two alternative procedures for authorisation processes: depending on the type of activity that is proposed, either a Basic Assessment (BA) process or a S&EIR process is required to apply for EA from the competent authority – in this case the National Department of Environmental Affairs (DEA). SRK has determined that the proposed runway re-alignment and

associated infrastructure trigger activities listed in terms of Listing Notices 1-3 of the EIA Regulations, 2010 (Table 1).

Table 1: Listed activities triggered by the Project

No	Description
Listing Notice 1 (requiring BA)	
9	The construction of infrastructure longer than 1 000 m for the bulk transportation of stormwater.
11	The construction of channels, bulk stormwater outlet structures or 50 m^2 of infrastructure or structures within a watercourse or within 32 m of a watercourse.
18	The infilling or depositing of more than 5 m^3 of any material into a watercourse.
24	Transformation of land bigger than 1 000 m^2 to residential, retail, commercial, industrial or institutional use, where land was zoned open space, conservation or had an equivalent zoning.
28	The expansion of or changes to existing facilities for any process or activity where such expansion or changes to will result in the need for a permit or license in terms of national or provincial legislation governing the release of emissions or pollution.
39	The expansion of channels or bulk stormwater outlet structures, within a watercourse or within 32 metres of a watercourse.
50	The expansion of airports where the development footprint will be increased.
Listing Notice 2 (requiring S&EIR)	
7	The construction of runways or aircraft landing strips longer than 1.4 km.
15	The physical alternation of undeveloped, vacant or derelict land where the total area to be transformed is 20 hectares or more.
Listing Notice 3 (requiring BA in the sensitive areas)	
13	The clearance of an area of 1 ha or more of vegetation where 75% or more constitutes indigenous vegetation within a Critical Biodiversity Area (CBA).

Consequently, the proponent is obliged to apply for EA for the Project. Since activities listed under Listing Notice 2 apply to the Project, an S&EIR process is required.

Authorisation of relevant activities listed in terms of the EIA Regulations, 2014 will also be applied for.

A Water Use Licence in terms of section 21 of the National Water Act 36 of 1998 (NWA) is required from the Department of Water and Sanitation. Water use activities applicable to the Project are listed in Table 2.

Table 2: NWA water use activities for the Project

No	Description
c	Impeding or diverting the flow of water in a watercourse.
i	Altering the bed, banks, course or characteristics of a watercourse.

A number of regional plans and frameworks are applicable to the Project area and the Project is largely aligned with the objectives of these plans.

The Airport Master Plan for Cape Town International Airport was prepared in 2001 and revised in 2006. During the revision, the feasibility of a number of layout and land use planning options was analysed. The Airport Master Plan makes provision for the optimised utilisation of the airport site, ultimately assuming two (re-aligned) primary runways. The proposed Project is considered the first key step to alleviate current development constraints, allowing for optimal use of the airport as per the Airport Master Plan.

3 ENVIRONMENTAL PROCESS

The EIA Regulations, 2010, define the detailed approach to the S&EIR process, which consists of two phases: the Scoping Phase (*completed in July 2014*) and the Impact Assessment Phase (*current phase*) (see Figure 2).

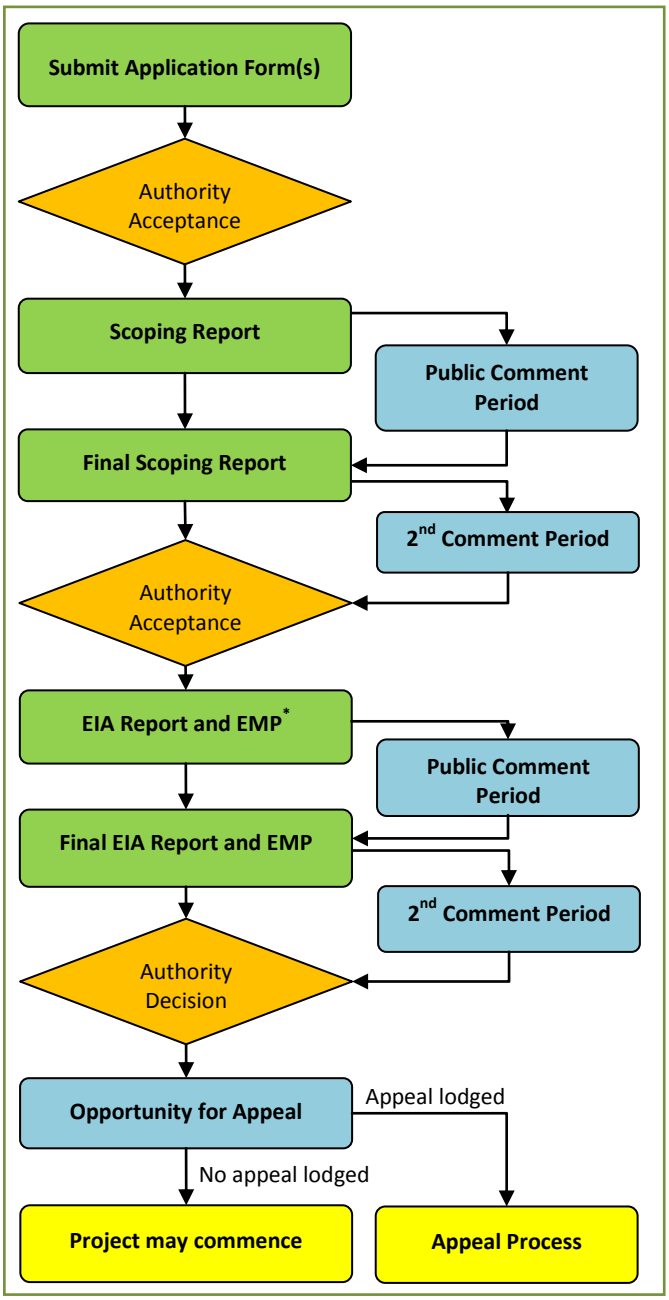

Figure 2: S&EIR Process

Note: *EMP = Environmental Management Programme*

The Scoping Phase was completed in July 2014 and the Final Scoping Report was accepted by DEA on 30 September 2014.

The EIA has been undertaken in accordance with the Plan of Study for EIA which was included in the Scoping Report accepted by DEA. The key objectives of the EIA are to:

- Inform Interested and Affected Parties (IAPs) about the proposed Project and the EIA process followed;
- Obtain comments from IAPs (including the relevant authorities and the public) and ensure that all issues, concerns and queries raised are fully documented and addressed in the EIA Report;
- Identify and assess potential significant impacts associated with the proposed development;
- Formulate mitigation measures to avoid and/or minimise impacts and enhance benefits of the Project; and
- Produce a Final EIA Report which will provide all the necessary information for DEA to decide whether (and under what conditions) to authorise the proposed Project.

The EIA Regulations, 2014 do not govern the EIA process.

4 DESCRIPTION OF THE SITE AND ENVIRONMENT

Cape Town International Airport is located in the sandy Cape Flats region, immediately north of the N2, approximately 20 km east of Cape Town's Central Business District. The current airport property (see Figure 1) is approximately 975 ha in extent, incorporating the existing primary and secondary runways, passenger terminal buildings to the west of the runways, cargo facilities to the north and a small portion of undeveloped land to the east of the runways.

In the north-eastern portion of the existing airport property, Airports Company South Africa is in the process of developing a commercial and industrial node (referred to as Precinct 3).

Further east of the airport property, adjacent to the existing airport boundary, is a large (~400 ha) portion of derelict land, heavily infested with alien vegetation and used for illegal activities such as dumping. Small sand dunes with isolated patches of indigenous *Cape Flats Dune Strandveld* vegetation and some small wetlands also occur in this area. *The False Bay form of Cape Flats Dune Strandveld occurring within the Project footprint is rapidly approaching Critically Endangered status with only 23.8% remaining, however the site is largely transformed and degraded.* Some wetlands and patches of indigenous vegetation are identified as CBAs or associated support areas. This property is owned by the State, Provincial Government and SANRAL. Airports Company South Africa proposes to acquire this land to accommodate the Project and future expansion of the airport.

The area surrounding the airport consists of mixed land use including residential, industrial and commercial use. Communities adjacent to the airport are highly marginalised with relatively low levels of income.

Figure 3: Wetland on land east of the airport

5 EXISTING AIR TRAFFIC

Passenger aircraft arrivals and departures at Cape Town International Airport currently occur between 05h45 and 23h25 in winter and 05h45 and 00h15 in summer. Three cargo flights operate at 02h00, 03h15 and 04h00. All aircraft approaching and departing the airport do so either by following designated instrument flight paths or by visual approach, depending on weather conditions and visibility.

The existing runway is able to accommodate up to 30 aircraft landing or departing (Air Traffic Movements [ATM]) per hour, but processes around 25 ATM per hour.

6 PROJECT DESCRIPTION

6.1 Project Infrastructure

Airports Company South Africa proposes to construct a new runway, rotated counter-clockwise by 11.5 degrees, to replace the existing primary runway (Runway 01-19). The northern end of the new runway (Runway 18-36) will be positioned 220 m to the east of the current Runway 01-19. It will comply with international specifications for Code F aircraft, increase runway capacity and enable future airport expansion.

In addition to the re-alignment of the primary runway, the current Project will also include:

- A taxiway system;
- Infrastructure such as an aircraft isolation pad (AIP), a compass calibration pad and an aircraft run-up area;
- Security facilities including a perimeter fence;
- Service roads;
- Buildings and service infrastructure, *including stormwater infrastructure;*
- Upgrading of the stormwater management system; and
- Bulk earthworks for the sourcing and on site use of cut/fill material.

The proposed Project footprint is approximately 700 ha in extent (Figure 1). Construction is expected to take 24 to 30 months to complete. Construction activities that disrupt operation of the existing runway will take place at night (for approximately 4 months).

It is estimated that up to 200 direct temporary jobs will be created during construction and that between 900 and 3 200 people will be newly and directly employed by Airports Company South Africa in the long term.

The relocation of informal settlements (Freedom Farm, Malawi Camp and Blikkiesdorp) is excluded from the SoW of the EIA and will be dealt with by the City of Cape Town (CoCT). The impacts of the runway re-alignment on the surrounding communities, including these settlements is however assessed in the EIA.

6.2 Airport Operations

Once the runway is re-aligned, flight paths for aircraft approaching and departing the airport will change. Runway 18-36 will allow capacity at the airport to increase *from 30 ATM per hour (if the existing runway operates at maximum capacity)* to 40-44 ATM per hour although aircraft arrival and departure times are not expected to be extended in the foreseeable future, due *inter alia*, to the absence of demand for slots during other (less convenient, passenger-friendly) times. *The number of flights per hour varies throughout the day and seasonally and is difficult to predict for the future given the unknowns surrounding demand, growth, technology improvements, fleet mix, aircraft type etc. As a worst case scenario (on a busy day) it is estimated that during peak times, and once the airport reaches maximum operating capacity, aircraft could land or depart at a frequency of 1 approximately every 1,5 minutes (although communities under the flight path would experience only half of these ATMs as overhead flights.)*

Instrument flight paths for Runway 18-36 are illustrated in Figure 4.

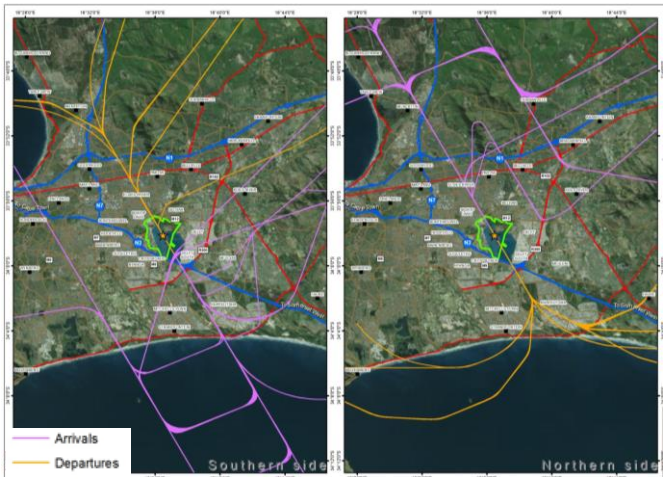

Figure 4: Flight paths for arrival from the south (left) and from the north (right) on Runway 18-36

7 ALTERNATIVES

The EIA Regulations, 2010, require that all S&EIR processes identify and describe feasible and reasonable alternatives. Numerous alternatives were identified and considered during airport master planning, which informed the early feasibility and design phases of the Project.

Re-alignment of the existing runway through counter-clockwise rotation is the only operationally feasible alternative to the existing runway alignment and will allow for the future development of a parallel second runway.

It is not considered financially feasible nor within Airports Company South Africa's mandate to develop a new airport at an alternative when the current site has not been optimised.

Considering the No Go alternative is a requirement of the EIA Regulations, 2010.

No Go alternative: this entails no change to the existing runway, which will remain in its current position. However, the No Go alternative is not synonymous with the baseline or *status quo*, *since airport traffic may continue to grow whether the runway is re-aligned or not. The No Go is the maximum capacity to which the airport can grow without requiring EA (Scenario 2 in the EIA).*

8 STAKEHOLDER ENGAGEMENT

Stakeholder engagement is a key component of the S&EIR process and is being undertaken in accordance with the requirements of the EIA Regulations, 2010. The key stakeholder engagement activities during the Impact Assessment Phase are summarised in Table 3 below.

Table 3: Stakeholder Engagement during Impact Assessment Phase

Activity	Date
Advertisements announcing availability of EIA Report for public comment	March 2015
Public comment period	31 March to 25 May 2015
Focus Group Meetings and Public Open Days	April and May 2015
Additional studies and amendments to EIA Report to address comments	*June 2015 – June 2016*
Second public comment period	*25 July to 25 August 2016*
Finalise the EIA Report and submit to DEA	*September 2016*

Key comments and concerns raised by stakeholders predominantly related to:

- **The changes in noise levels** associated with increased flight frequency and changes in flight paths;
- Implications of changes in noise levels on suitable **land use surrounding the airport,** implications *on* property *values* and long term spatial planning;
- Loss of natural habitats, specifically **wetlands**;
- Identification of **alternatives** for assessment in the EIA;
- Impacts on **current airport operations**;
- The **need and desirability** of the Project;
- Potential impacts on the **hydrological system** around the airport; and
- *Potential impacts of increased noise and atmospheric emissions on the **health** of surrounding communities.*

Relevant local, provincial and national authorities, conservation bodies, local forums and surrounding landowners and occupants have been directly notified of the S&EIR process *and all registered stakeholders have been notified* of the release of the *Final* EIA Report for comment.

9 SUMMARY OF NOISE IMPACTS

The key concerns raised by stakeholders relate to the increase in aircraft noise and the frequency of high noise events which surrounding communities would experience.

*An **indicative estimate** of the expected changes in the **frequency of flights** experienced by residents in a suburb to the north and a suburb to the south of the airport under the flight paths between Scenario 2 (the existing runway operating at maximum capacity) and Scenario 4 (the re-aligned runway operating at maximum capacity) is provided in Table 4.*

Table 4: Indicative estimate of changes in flight frequency

Flight frequency (average minutes between flights)		
	Scenario 2	Scenario 4
Early morning (00h00- 03h00)	30 - 60 min.	30 – 60 min.
Morning and afternoon peaks	5 - 6 min.	3 min.
Late night (21h00 – 22h00)	24 - 30 min.	4 - 6 min.

*Airports Company South Africa has committed to **implementing specific operational mitigation measures** which best address the noise impacts. This decreases the size of the area affected by noise above the 55 dB(A) guideline level for Scenario 4 (with mitigation) when compared with Scenario 4 (without mitigation). The size of the area, number of people as well as community facilities (sensitive receptors) affected by noise above the 55 dB(A) guideline level are presented in Table 5 for comparative purposes.*

Table 5: Area, number of people and community facilities experiencing noise above 55 dB(A) guideline

	Without mitigation		With mitigation
	Scenario 2	Scenario 4	Scenario 4
Size of area affected	56.3 km^2	71 km^2	65.6 km^2
People affected[1]	297 209	344 831	286 113
Community facilities affected			
Health facilities	12	15	8
Schools	132	177	144
Libraries	8	7	5

Although the physical size of the area affected by noise above the 55 db(A) guideline would be larger for Scenario 4 (with mitigation) than Scenario 2, the shift in noise contours over less populated areas decreases the number of people affected.

The number of households affected by changes in noise levels for Scenario 4 compared to Scenario 2 are presented in Table 6.

Table 6: Households affected by changes in noise levels

Number of households experiencing	Scenario 4	
	Without Mitigation	With mitigation
Lower noise levels	59 900	66 040
Noise reduced below guideline	47 440	56 680
Similar noise	18 520	14 199
Higher noise levels	82 990	71 740
Noise above guideline for the first time	68 800	61 030

[1] *Based on constant 2011 population figures, but relevant for illustrative purposes*

10 ASSESSMENT OF POTENTIAL IMPACTS

Specialist studies undertaken to investigate key potential direct, indirect and cumulative impacts are as follows:

- Air Quality Specialist Study;
- Noise Specialist Study (and independent review);
- Hydrogeology Specialist Study;
- Freshwater Ecology Specialist Study;
- Terrestrial Ecology Specialist Study;
- Socio-economic Specialist Study (including analysis of the impacts on land use in areas affected by noise);
- Transport Specialist Study;
- Heritage Input;
- *Property Valuation Study; and*
- *Health Assessment Study.*

For all potentially significant impacts, the significance of the anticipated impact was rated without and with recommended mitigation measures. These impacts are presented in Table 7.

The significance of potential impacts of the proposed Project was determined in order to assist decision-makers. Relevant observations with regard to the overall impact ratings, assuming mitigation measures are effectively implemented, are:

- The predicted *heritage* impacts are rated as *insignificant*, given significant previous disturbance to and the very low heritage sensitivity of the site, although it is plausible that material of archaeological or palaeontological value may be uncovered during earthworks.
- The predicted *air quality* impact during construction is rated as *insignificant. H*owever, during operations, the predicted impact of increased emissions on air quality is rated as *medium*. The predicted impact of the associated risk (incidence) of increased health effects is rated as *low*.
- The predicted *noise and vibration* impacts during construction are rated as *insignificant* if construction activities closest to surrounding communities are mitigated. At maximum capacity, the predicted noise impact during operations is rated as *high* due to the extent of the area, and communities exposed to, exceedances of ambient noise guideline levels. *With the implementation of mitigation measures to which Airports Company South Africa and industry stakeholders are able to commit, the area affected by noise exceeding guideline levels for Scenario 4 would be smaller (with fewer people affected) than for Scenario 2.*
- The predicted *hydrogeology* impacts are rated as *very low*, with the primary concern being slightly elevated local groundwater levels as a consequence of alien vegetation clearance, bulk earthworks and increased sealed surfaces.
- The predicted impacts on *freshwater ecology* are generally rated as *low to insignificant*, apart from the loss of endangered Western Strandveld wetland habitat which is rated as *medium* and will require a wetland offset.
- The predicted impacts on *terrestrial ecology* are rated as *medium* to *very low. While the False Bay form of Cape Flats Dune Strandveld occurring within the Project footprint, is rapidly approaching Critically Endangered status with only 23.8% remaining, the vast majority of the site has been significantly degraded and transformed* and limited fauna is present in the area.
- The predicted *social* impacts are largely linked to increased noise levels in communities around the airport, escalating as the re-aligned runway approaches maximum capacity. With predicted exceedances of noise level guidelines in residential areas up to 15 km from the airport, a significant number of people may experience impacts on their quality of life. Conversely, many others (though fewer) will experience reduced noise levels, which may improve quality of life. The resultant negative and positive impacts on different communities are both rated as *high*, though the net adverse impact remains rated as *high*. The impact on housing provision by the City of Cape Town (CoCT) is rated as *medium*.
- The predicted direct *economic* benefits of the Project are rated as *low* during construction and *medium* during operations, however the indirect benefits of investment in and stimulation of the regional economy are more substantial, and are rated as *high* during operation. *The predicted impact of increased noise on property values is rated as low.*
- *The predicted impact of the associated risk (incidence) of increased health effects of increased air pollution is rated as low. Although health effects of noise have not been rated, exposure to noise in the communities around the airport could be a bigger public health risk than air quality because more people will be exposed, and levels of noise in many areas exceed guideline limits; however it seems unlikely that a change in noise exposure related to airport operations will lead to a dramatic change in hypertension prevalence in the surrounding communities. The additional burden of disease in Cape Town from Scenario 4 compared to Scenario 2 will likely be extremely small because the additional numbers of people exposed to noise pollution are comparatively low.*

- The predicted *visual* impacts are rated as *low*, as the area is already dominated by existing infrastructure and operations at the airport.
- The predicted *transport* impacts are rated as *very low*, since airport-related road traffic is considered negligible in terms of total traffic volumes. Although many of the intersections adjacent to the airport are currently operating at poor Levels of Service, required upgrades to alleviate congestion have been identified for implementation by the relevant roads authorities, irrespective of the proposed Project.

Given its location in an urban setting, the airport is one of many contributors to cumulative impacts, and as such, the contribution of the Project is expected to be relatively limited at a regional scale with respect to most cumulative impacts. As one of the main contributors to noise in the area, the Project is however expected to affect cumulative noise levels quite substantially as the runway approaches full operational capacity.

Table 4 below summarises:

- The impacts assessed in the EIA;
- Their significance before and following the implementation of essential mitigation measures; and
- The key mitigation measures on which the significance rating is based (where applicable).

Impact Significance Ratings Legend:

Rating	-ve	+ve
Insignificant	I	I
Very Low	VL	VL
Low	L	L
Medium	M	M
High	H	H
Very High	VH	VH

Table 7: Summary of Impacts

Impact	Before Mitigation	After Mitigation	Key mitigation/optimisation measures
Construction Phase Impacts			
Destruction and Loss of Heritage Resources	I	I	• Adequately record and obtain a permit to destroy historic structures. • Implement a chance finds procedure for heritage material uncovered during construction.
Impact of Construction Activities on Air Quality	VL	I	• Apply dust suppression methods on all disturbed /exposed areas. • Minimise material handling and travel distances on site. • Implement a speed limit of 30km/hr on all unpaved roads on site. • Avoid controlled burning during periods of strong wind.
Nuisance to Surrounding Receptors caused by Noise during Construction	VL	I	• Maintain construction equipment in good working order. • Limit the night time construction activities to the essential. • Limit construction activities to at least 100m from residential areas during the day and 350m at night. Alternatively install temporary noise barriers.
Nuisance to Surrounding Receptors caused by Vibration	I	I	• No mitigation
Impact on Groundwater Levels due to construction	M	M	• No mitigation
Impact on Groundwater Quality due to construction	I	I	• Prevent spills of hydrocarbons or other contaminants. • Take immediate corrective action should spills occur.
Loss of wetland Habitat and Ecological Structure	H	M	• Identify and implement a suitable wetland offset. • Obtain approval from DWS for any activities within wetland areas.
Loss of Ecosystem Services	L	L	• Implement general good housekeeping measures.
Impacts on Hydrological Function and Sediment Balance	L	L	• Implement adequate erosion management. • Curtail sheet runoff from cleared areas and access roads. • Revegetate cleared areas as soon as possible.
Impacts on Freshwater Features located outside of the Project Footprint Area	L	VL	• Implement adequate erosion management. • Discharge runoff into freshwater systems beyond the site in such a way as to prevent erosion.
Loss of Terrestrial Habitat	*M*	*M*	• Revegetate disturbed areas with grass species *unpalatable to birds and mammals and* indigenous to the region if possible.
Loss of Floral Diversity, Floral SCC and Protected Floral Species	L	VL	• Rescue and relocate indigenous or protected species and floral SCC. • Obtain a permit from CapeNature to remove any protected species.
Loss of Faunal Diversity, Faunal RDL Species and Protected Faunal Species	L	VL	• Rescue and relocate faunal species to a suitable habitat. • Obtain a permit from CapeNature to remove any protected species. • Strictly prohibit hunting and trapping of fauna.
Impacts Associated with *Bathyergus Suillus* (Cape Dune Mole Rat)	L	L	• Install mole proof fencing around the airport. • Rescue and relocate moles to surrounding open veld areas.
Loss of Access to Resources on Land East of Existing Airport	L	L	• Offer communities the opportunity to remove combustible material (firewood), prior to earthworks

Impact	Before Mitigation	After Mitigation	Key mitigation/optimisation measures
Nuisance Effects of Construction Related Noise	VL	VL	• Notify residents and schools close to the site of construction schedule. • Develop and implement a grievance mechanism.
Generation of Employment, Income and Skills Training	VL	VL	• Include in tender documents the need for employment of local labour as far as possible and provision of job-specific training for construction staff.
Increased Revenue to Government	I	I	• No mitigation required.
Increased Investment in and Stimulation of the Western Cape Economy	M	M	• Maintain ongoing communication with appropriate business forums to optimise opportunities for local development.
Altered Sense of Place and visual Quality caused by Construction Activities	L	VL	• Limit removal of vegetation and rehabilitate disturbed areas incrementally. • Minimise the footprint of the construction camp. • Maintain the natural topography along the eastern boundary of the site.
Impact of Construction Traffic on the Existing Road Network	VL	VL	• No mitigation required.
Operations Phase Impacts			
Altered Air Quality from Increased Emissions due to Increased ATM	M	M	• Investigate and implement mitigation measures aimed at reducing aircraft fuel consumption and related emissions. • *Provide evidence to the authorities of the investigation of such mitigation measures.*
Noise Impacts of the Re-aligned Runway and Increased Operational Capacity	VH	H	• Maintain effective communication with affected public regarding noise. • Integrate grievance mechanism with noise monitoring system to correlate complaints with noise events and report to authorities. • Where possible design and implement noise preferential flight paths. • Implement take-off, departure and approach procedures aimed at reducing noise (e.g. flying at higher altitudes, reduced engine thrust). • *Implement Noise Abatement Departure Procedure 2, unless it can be shown that another NADP will reduce noise impacts more and will be implemented.* • Restrict the use of reverse thrust, intersection take-offs and engine ground run-ups between 22h00 and 06h00 unless required for safety reasons. • Formally engage with the City of Cape Town *and/or Provincial Government* to encourage airport-compatible land use planning. • Establish a noise monitoring committee to monitor the effects of noise mitigation.
Nuisance to Surrounding Receptors caused by Vibration	I	I	• No mitigation
Impact on Groundwater Levels due to Operations	VL	VL	• Provide sub-surface drainage and stormwater systems at edges of impermeable surfaces.
Impact on Groundwater Quality due to Operations	VL	VL	• No mitigation required.
Loss of Wetland Habitat and Ecological Structure	I	I	• Implement general good housekeeping measures.
Loss of Ecosystem Services	I	I	
Impacts on Hydrological Function and Sediment Balance	I	I	• Drain stormwater from operational areas. • Curtail sheet runoff from paved surfaces and access roads. • Attenuate stormwater in order to prevent erosion.
Impacts on Freshwater Features located outside of the Project Footprint Area	M	L	• Minimise paved and sealed surfaces in order to reduce runoff. • Discharge runoff into freshwater systems off-site in such a way as to prevent erosion.
Loss of Faunal Diversity, Faunal RDL Species and Protected Faunal Species	L	VL	• Rescue and relocate faunal species to a suitable habitat. • Obtain a permit from CapeNature to remove any protected species. • Fence the airport to prevent the movement of fauna onto the site.
Impacts Associated with *Bathyergus Suillus* (Cape Dune Mole Rat)	L	VL	• Maintain mole proof fencing around the airport. • Rescue and relocate moles to surrounding open veld areas.
Impacts of Changes in Aircraft Flight Paths on Avifaunal Flight Paths	L	L	• Implement the airport's Wildlife Management Plan
Impacts Associated with Bat Strikes	VL	VL	• Assess the risk of bat strikes and if necessary implement measures to avoid the creation of habitats or conditions which attract bats or insects on which bats feed.

Impact	Before Mitigation	After Mitigation	Key mitigation/optimisation measures
Impacts on Quality of Life in Areas with Increased Noise Levels	VH	H	• Re-model the noise contours every 5 years to account for changed policies, improved technologies, altered flight paths and schedules, etc. • Submit revised noise contours to the CoCT. • Keep stakeholders informed of changes to predicted noise levels. • Continually identify new noise abatement measures, considering international trends and best practice for managing noise impacts. • *Monitor noise to ensure that actual noise levels do not significantly exceed the predicted noise levels (as modelled by the noise specialist), and where required, implement additional mitigation measures.* • Develop and implement a grievance mechanism, integrated with the noise monitoring system to correlate complaints and responses.
Improved Quality of Life in Areas with Decreased Noise Levels	H	H	• No optimisation required.
Impacts on Future Housing Developments by CoCT	H	*M*	• Re-model the noise contours every 5 years to account for changed policies, improved technologies, altered flight paths and schedules, etc. • Submit revised noise contours and encourage the CoCT to consider the implications of predicted noise (contours) in future land use planning.
Impact of Increased Noise on Property Values	*VL*	*VL*	• *Comply with all mitigation measures intended to reduce the noise impacts as far as possible.* • *Develop and implement a general Grievance Mechanism.* • *Encourage the CoCT to consider the implications of predicted noise (contours) in future land use planning.*
Generation of Employment, Income and Skills Training	M	M	• Prioritise the employment of local people with appropriate skills.
Increased Revenue to Government	M	M	• No optimisation required.
Increased Investment and Stimulation of the Western Cape Economy	H	H	• No optimisation required.
Health Effects of Increased Air Pollution	L	L	• *Investigate and where possible implement the recommendations for the reduction in air emissions.* • *Provide evidence to the authorities of the investigation of such mitigation measures.*
Health Effects of Increased Noise	-	-	• *Implement the mitigation measures considered in Mitigation Scenario B of the noise impact assessment unless Airports Company South Africa is able to confirm that alternative mitigation measures will allow for a greater reduction in population numbers affected by noise.*
Altered Sense of Place and Visual Quality	L	L	• Limit lighting to essential activities and facilities and minimise light spillage.
Impact of Airport-related Road Traffic on the Existing Road Network	VL	VL	• No mitigation required.

11 CONCLUSION AND WAY FORWARD

This *Final* EIA Report has identified and assessed the potential biophysical and socio-economic impacts associated with the proposed re-alignment of the primary runway and development of associated infrastructure at Cape Town International Airport.

The runway re-alignment will generate a number of significant impacts, but most of these can be reduced to compliant levels assuming that the recommended mitigation measures will be effectively implemented. Indirect economic benefits are also expected to be relatively significant.

High (net) noise impacts and associated implications for land use planning are very difficult to mitigate and current practice suggests communities will continue to demand, and the CoCT continue to provide, housing in areas where existing noise does and is predicted to exceed guidelines.

Airports Company South Africa is committed to ensuring that the airport is operated to the highest standards, achieved through implementation of the recommended mitigation measures and ongoing monitoring of performance. A "Joint Statement of Intent" regarding the mitigation of noise impacts in the short, medium and long term was adopted by Airports Company South Africa, industry stakeholders and the City of Cape Town.

Although noise impacts are unavoidable, with the implementation of key operational noise abatement (mitigation) measures, the noise footprint of the re-aligned runway can be significantly reduced and fewer people would be affected by noise exceeding guideline levels than for the No-Go alternative.

With the exception of noise, the EAPs believe and the EIA Report demonstrates that, through effective implementation of the stipulated mitigation measures, the adverse impacts can be reduced to levels compliant with guidelines.

SRK believes that sufficient information is available for DEA to take a decision. The fundamental decision is whether to authorise the Project, which brings major economic benefits and is generally consistent with development and planning policies for the area, but which will generate noise which exceeds guideline levels in residential communities, especially once operating at maximum capacity.

SRK believes that the specialist studies have shown that the development of the Project is generally acceptable, but that noise impacts and implications for land use planning will have to be weighed against the indirect economic benefits. The EIA has also assisted in the identification of mitigation measures that will mitigate the impacts associated with these components to within tolerable limits (aside from noise).

Ultimately, DEA will need to consider whether the Project benefits outweigh the potential impacts.

HOW YOU CAN YOU PARTICIPATE IN THE EIA PROCESS

The *Final* EIA Report *has been amended to address* comments received from stakeholders *throughout the EIA process*. *Stakeholders are, however, now afforded an additional opportunity to review the Final EIA Report and submit any additional comments which* will assist DEA in making a decision regarding the application. If you require assistance in compiling and submitting comments, please contact us and we will ensure that you receive appropriate support. Once stakeholders have commented on the information presented in the *Final* EIA Report, the Report *along with any additional comments received* will be submitted to DEA *to inform their decision on whether or not the project can be authorised*. Once a decision is taken by authorities, this decision will be communicated to registered IAPs.

REGISTER OR PROVIDE YOUR OPINION

Register or send written comment to:

Scott Masson

SRK Consulting

Postnet Suite #206, Private Bag X18,
Rondebosch, 7701

Tel: + 27 21 659 3060

Fax: +27 21 685 7105

Email: smasson@srk.co.za

IAPs are invited to comment, and/or to register on the Project database. IAPs should refer to the DEA reference number, and must provide their comments together with their name, contact details (preferred method of notification, e.g. email), and an indication of any direct business, financial, personal or other interest which they have in the application, to the contact person below, by ***25 August 2016***.

REVIEW THE REPORT

Copies of the complete report are available for public review at the following locations:

- Cape Town Central Library;
- Plumstead Library;
- Bellville Library;
- Somerset West Library;
- Delft Library;
- Delft South Library;
- Belhar Library;
- Bishop Lavis Library;
- Crossroads Library;
- Manenberg Library;
- Nyanga Library;
- Philippi East Library;
- Elsies River Library;
- Valhalla Park Library;
- Khayelitsha Library;
- Edgemead Library;
- Cape Town International Airport Southern Office Block Reception;
- SRK's Cape Town office; and
- SRK's website: http://www.srk.co.za/en/za-cape-town-international-airport-runway-re-alignment-eia