



# **THE MANDELA BAY AEROTROPOLIS AND LOGISTICS GATEWAY**

**Creating an International Window for  
Growth and Investment in South Africa**

# AN EXPANDED CAPABILITY AND FUNCTION LOCATED ADJOINING AN EXISTING REGIONAL AIRPORT (PLZ) IN MANDELA BAY – EASTERN CAPE

## CREATING AN INTERCONTINENTAL GATEWAY AND AEROTROPOLIS MASTER DEVELOPMENT



### **CAPITALIZING ON ESTABLISHED**

- International tourism
- Manufacturing
- Marine and port activity
- Transportation and logistics
- Agriculture
- Intercontinental broadband infrastructure

### **AS A MULTIFACETED DEVELOPMENT**

### **AND**

### **BUSINESS-DRIVEN INITIATIVE**

### **UTILIZING A NEW MODEL**

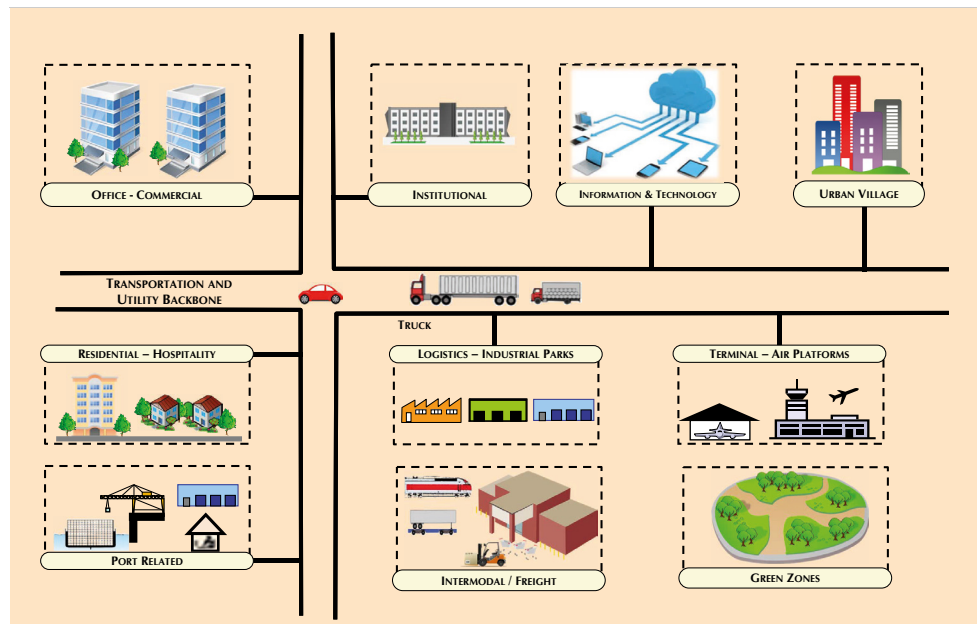
### **WITH**

### **PUBLIC AND PRIVATE-SECTOR STAKEHOLDERS**

## AEROTROPOLIS AND LOGIS- TICS GATEWAY – AN INTEGRATED MASTER DEVELOPMENT

The proposed Aerotropolis and Logistics Gateway Development is to be located on a 450 ha land area adjoining the existing regional airport (PLZ). The initiative incorporates a new 3,300 m runway as a multifunctional solution, utilizing a new model.

The plan encompasses a number of synergistic ventures involving diverse private and public sector stakeholders. This will meet both financial and economic development objectives.



### Elements of the overall plan include

- the airside infrastructure (runways-taxiways and nav aids)
- the passenger terminal (including customs and immigration functions)
- attached and remote aircraft hardstands handling widebody and narrowbody aircraft
- an industrial-logistics development zone
- an air cargo facility with attached hardstands
- a smart village and incubator development
- a hybrid electrical microgrid
- an agrivoltaics venture
- associated ventures outside the land area

The initiative enables a phased implementation, minimizing capital costs while meeting market needs.

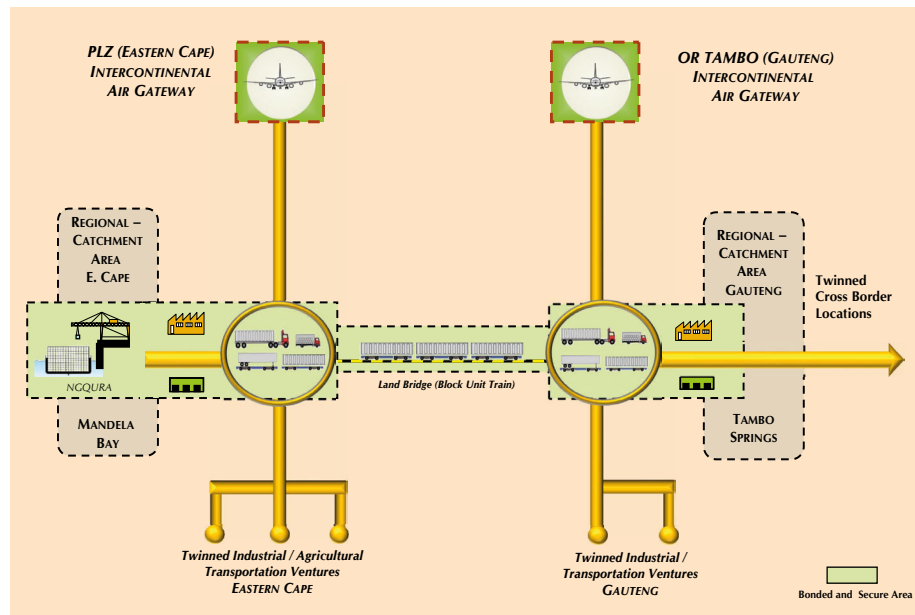
## AN AFRICAN GATEWAY

Presently, the Eastern Province in South Africa has a world-class seaport infrastructure but is inefficiently connected by air. Passengers and air freight have to make use of airports in Cape Town and Johannesburg to reach the international markets with a lower level of service.

The new intercontinental air capability, therefore, will benefit established business in the Manufacturing – Logistics – Agriculture – Pharmaceutical and Marine Sectors, with an expanded market focus. It will further increase the number of foreign tourists attracted to the Province.

An international consultant (Franco Eleuteri and Associates) based in Dallas, Texas, defined the initial concept and development strategy utilizing master development, sea-air-inland port, special economic zone, and industrial-logistics expertise.

This utilizes a new model as a multi-functional solution on a 450 ha site adjoining the existing PLZ airport in Mandela Bay, South Africa, which belongs to the Metro.



**Mandela Bay is the largest metropolitan area in the Eastern Cape**, with a population of approximately 1.3 million. The province is one of the four largest contributors to the South African GDP, with trade, catering, accommodation (tourism) and manufacturing being the largest contributors.

The metropolitan area is served by

- Ngqura, as a deepwater port with a capacity of 2 million TEU's per annum
- Port Elizabeth harbour, with a capacity of 400,000 TEU's per annum including bulk ore and vehicular RoRo capabilities

The region is further directly connected by rail to Gauteng, the largest commercial market in Africa.

The province does not, however, have intercontinental reach by air, while the existing airport (PLZ) being the third largest mover of airfreight, using dedicated narrowbody freighters to CPT and JIA (Cape Town and Johannesburg).

The Development therefore creates a true gateway location for movement into and from Africa as a world class capability.

## THE SITE

The Development is to be located on a site to the southeast of the existing PLZ regional airport. This location has previously been reserved as a site for the future development of the airport.

The masterplan is anchored by a new 3,300 m runway, with a 1,300 m separation to the existing narrowbody 2,000 m operation. This enables the creation of an internal industrial/logistics zone and a passenger terminal between the two runways.

The site, which is uninhabited/unused, has no significant gradients affecting runway construction. It is further in close proximity to the developed beachfront, the undeveloped coastal areas, and Nelson Mandela University. The 2Africa intercontinental undersea cable is in close proximity to the development with the existing infrastructure (roads, sewerage, water, electricity).







- Each of these ventures, with its own operational and business/financial characteristics, are part of an integrated plan. Interested parties can, consequently, be involved as participants in all or some of the individual opportunities.

The Development, therefore, enables its participants to achieve their individual interests while meeting the overall strategic goal.

Architectural floor plan of the Denver International Airport terminal, showing the layout of the main terminal building and the future expansion. The plan includes various functional areas such as the Main Terminal Building, Future Expansion, and various support buildings. Key features include the Main Terminal Building with its central concourse, the Future Expansion with its own concourse, and the various support buildings including the Air Traffic Control Tower, the Fire Station, and the Maintenance Hangar. The plan also shows the layout of the parking areas, the rental car center, and the baggage claim area. The overall design is a large, rectangular building with a central spine and several wings extending from it. The plan is oriented with North at the top. The scale bar at the bottom indicates a distance of 200 meters. The plan is labeled "Denver International Airport" and "May 28, 2002".



# ECONOMIC BENEFIT

The initiative utilizes a model meeting the strategic/economic and financial goals of the individual ventures. This enables a phased implementation of the master plan, reducing capital expenditure and mitigating risk.

An initial estimate of the capital expenditure for the aeronautical infrastructure—the passenger terminal—the industrial logistics complex, and a hybrid electrical microgrid is calculated at approximately \$230 million (USD).

## The economic benefit of the project is calculated as:

- *during construction* 1,700 full-time direct positions and a further 850 indirect jobs
- *on completion*, an overall economic contribution including industrial/logistics, maritime and passenger functions of over \$200 million per annum

It is expected that, as an intercontinental gateway airport, a doubling of existing passenger traffic to PLZ, as a regional airport, will occur.

The Development, therefore, builds on existing business while attracting new enterprises with an international focus.

This will benefit established enterprises in the Manufacturing – Logistic – Agriculture – Pharmaceutical and Marine Sectors, with an expanded market focus. It will further increase the number of foreign tourists attracted to the Province.

## POTENTIAL SEA-INLAND PORTS AND RAIL NETWORK





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