

Investing in South Africa's Aerospace and Defence Industry

Advanced manufacturing reaching for the sky

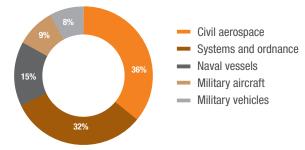




Commercial Aerospace and Defence in South Africa

- South Africa is home to sub-Saharan Africa's (SSA) most advanced and largest defence and military sector, with a number of globally-competitive military equipment and commercial aerospace manufacturers.
- South Africa is by far the largest market for business aircrafts in Africa with a fleet of more than 400 aircrafts, over three-times that of Kenya, the second largest market.
- With more than 60 aircrafts, South African Airways is the second largest commercial airline by fleet size in SSA.
- Annual revenues of the aerospace and defence industry amount to approximately US\$2.3bn.
- A number of local companies supply high-tech parts and components including turbines, dashboards, controls and wings to the global aerospace industry. In 2018, the sector exported aeroplane and helicopter parts to the value of US\$185m.
- South Africa is also among the world's leading manufacturers of armoured vehicles. In 2017, it exported armoured vehicles valued at R1.5bn (close to 50% of overall defence equipment exports).

Aerospace and defence industry revenues by segment, 2018





US\$2.3bn in aerospace and defence revenues

US\$185m

in annual exports of parts of aeroplanes and helicopters

Why invest?



Depth of local manufacturing capabilities

The 50 members of the Commercial **Aviation Manufacturing Association** of South Africa (Camasa) have a local content rate of 40% for their component manufacturing, reflecting the depth of the sector.

global UAV market within 10 years

Increasing role in peacekeeping

As a UN Security Council member, South Africa is likely to intensify its role in international peacekeeping missions. This is anticipated to drive expenditure on military equipment for

missions.

largest

contributor to UN peacekeeping missions

Emerging technology capabilities

South African defence equipment manufacturers have developed world-class capabilities in Unmanned Aerial Vehicles (UAVs) development and manufacturing for civilian and military applications. This makes South Africa a member of an elite group of countries with these capabilities. The global UAV market is growing rapidly and is expected to reach up to US\$70bn in the next 10 years.

Integrated and accredited value chain

The sector has established internationally accredited capabilities across the full manufacturing value chain. South Africa offers a fully-integrated value chain that includes general aviation, commercial aviation, military aviation, air traffic management, aircraft part and system manufacturing, propulsion avionics, sensors, ICT systems and other advanced manufacturing.

100 +

local companies involved in the aerospace sector

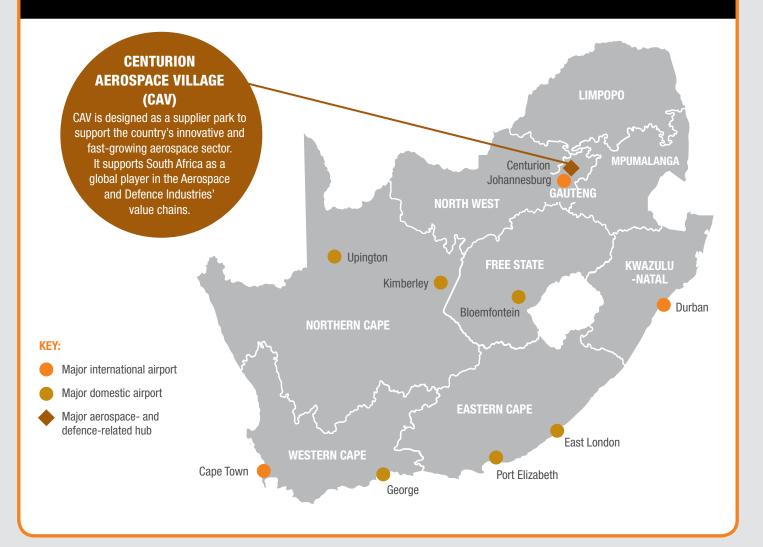
procurement requirements

Localisation drive

The South African Defence Sector Charter stipulates that at least 60% of defence equipment has to be procured from local companies. This increases opportunities for South African-based manufacturers.

Where to invest?

- > The aerospace industry is mainly concentrated in Gauteng, with a small cluster of space-focused companies located in the Western Cape.
- > The industry is highly concentrated, with five major companies dominating revenues, although small and medium-sized enterprises (SMEs) make up the majority of firms by number.
- > The Centurion Aerospace Village is an industry supplier park located north of Johannesburg, and clustered around a primary supplier, Aerosud. While the village is still at an early stage of development, it is envisaged that at least 10 aerospace companies will establish capabilities there.





1st in 2001: South African Aerosud Aviation became the first African parts manufacturer for global aircraft manufacturer Boeing, supplying between 60 000 and 80 000 parts per year.

1st in 1990: Maiden flight of South African-built Rooivalk, the world's first combat helicopter capable of flying a total 360-degree loop in flight.



What support exists?

> Given the sector's strong contribution to technology development, export earnings and its strategic role, the South African government is committed to creating an enabling environment for both local and international investors in the sector.



Aerospace Industry Support Initiative (AISI) **Steering** Committee AISI aims to position South Africa's

aerospace and defence industry as a global leader, especially in niche areas, by enhancing the sector's competitiveness. The initiative includes four programmes: supplier development; sector strategic support initiatives; industry development and technology support; coordination, promotion and awareness.



Joint Aerospace (JASC)

JASC is tasked with developing interventions and coordinating on clustering, skills development and strategic positioning of the South African



Skills **Development** and Research **Programmes**

13 South African research facilities provide aerospace and space technology related courses, as well as conduct world-class research in the field.



International Cooperation

The South African government is actively development of joint ventures between local and international companies using its strong diplomatic relationships, and by strengthening its defence ties with other emerging

Key industry exhibition

Africa Aerospace and Defence (AAD), held every two years in the City of Tshwane, is Africa's only aerospace and defence expo that combines both a trade exhibition and an air show with close to 500 exhibitors and more than 32 000 trade visitors.

What are the opportunities?

> Africa is expected to be the fastest growing region in terms of passenger air traffic in the next 20 years. Airlines in the region are expected to upgrade, replace and increase their fleets, providing opportunities for players in the sector ranging from the supply of aircrafts and parts, to maintenance and other aviation services.

Investment opportunities include:

- Ground support equipment
- Passenger transport vehicles
- Cargo de-grouping and logistics
- Air traffic control systems
- Instrument landing systems
- · Aircraft technician training systems
- Drone components, systems and training
- **Engine management** systems
- **Precision tooling**
- Maintenance, repair and overhaul (MRO) certification
- Flight training systems

How to invest?

Opportunity identification

- Conduct 1 feasibility study for your product or service
- Evaluate outcome of feasibility study
- Take investment 3 decision
- Decide on 4 investment strategy in order to best align to the market opportunity

Go ahead



identification

Investment preparation

- Decide on geographic location most suitable for investment
- Consult property specialists, real estate agents to identify suitable offices for operations
- Conduct site visits of suitable locations
 - Consult with HR/ recruitment agencies about staff requirements
 - Determine immigration requirements
 - Determine funding model (e.g. self-funding, debt, equity)
 - Consult with IT systems providers
- Apply for finance
 - Set-up IT infrastructure/ systems



Resourcing

requirements

(HR, capital,

finance, IT)

Compliance and legal affairs

- Determine corporate structure
- Determine licensing and permit requirements
 - Consult with labour lawyers
- Consult with InvestSA to identify eligibility for incentives, skills and other support initiatives

- Investment execution
- Acquire/lease site, rent office space
- Apply for municipal services (e.g. water, electricity)

- Conduct interviews, hire staff
- Apply for work permits for expatriate staff
 - Open a bank account
- Register company
- Apply for licenses and
- Apply for National Level Incentives Schemes. Skills and Other Support Programmes

InvestSA ready to assist

"Over the past 20 years, Aerosud shareholders, have consistently invested in South Africa's commercial aerospace manufacturing sector, leveraging on the technology level offered by local companies and partners in engineering, design and manufacturing. World-class aerospace experience and skills at system integration level exist in SA and a deep understanding of future technologies and trends are part of the long-term strategy of all of the successful companies in the country."

Aerosud Managing Director - Aviation

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Information sources

BIS Research, 2019; BMI, various years; Boeing Company, 2019; DefenceWeb, various years; **the dti**, various years; Engineering News, various years; Embassy of the Italian Republic, 2017; National Conventional Arms Control Committee, 2018; Statista, various years; TEDA, 2019.

Research partner Deloitte.



