

Investment & Trade Initiative Brasil



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Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

Advanced Manufacturing: Aerospace & Defense

Deputy Director: Janine Fredericks



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Scope

- Purpose of our visit
- Role of the Industrial Development Division
- Overview of Aerospace & Defense Initiatives within the DTI
- Aerospace Sector Development Plan
- The South African Aerospace & Defense Industry
- Why procure from SA
- SADI – Strategic Industrial Sector
- ITI – SA Contingent
- Future Industry Engagements
- End





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Purpose of our visit

- The purpose of this initiative to identify opportunities for collaboration in the aerospace and defense sector that will meet the immediate, medium and long term requirements for both nations.
- Brazil will be hosting the 2014 FIFA World Cup and the 2016 Olympics and with South Africa having successfully hosted the most recent soccer World Cup; great could be explored in the trading of products and also the transfer of skills, expertise and services.
- This is an initiative **over and above** those of IBSA Defence and IBSA Space as well as other bi-national agreements or initiatives.
- The Department of Trade and Industry recognizes forums between the SA Department of Defence and Brazilian Department of Defence and is playing a supportive role by promoting the SA Defence Industry's products and capabilities as well as their success with other OEMS and other countries.





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Role of Advanced Manufacturing Unit

- Advanced Manufacturing (Aerospace) is categorized as cluster 3 of IPAP, which has been identified as a sector with “potential for development of long-term advanced capabilities”

Objectives;

- Build and develop capabilities for entry into activities not heavily dependant on low cost or high technology production
- Build Human and Technological capabilities associated with the knowledge economy
- Identify and participate competitively in more dynamic value chains, within both the domestic and global markets
- Promote the mastering of highly regulated safety, quality and recognised Certification / accreditation requirements of advanced manufacturing sectoral grouping
- Promote and retain SA intellectual property in the form of world class processes, products and services.



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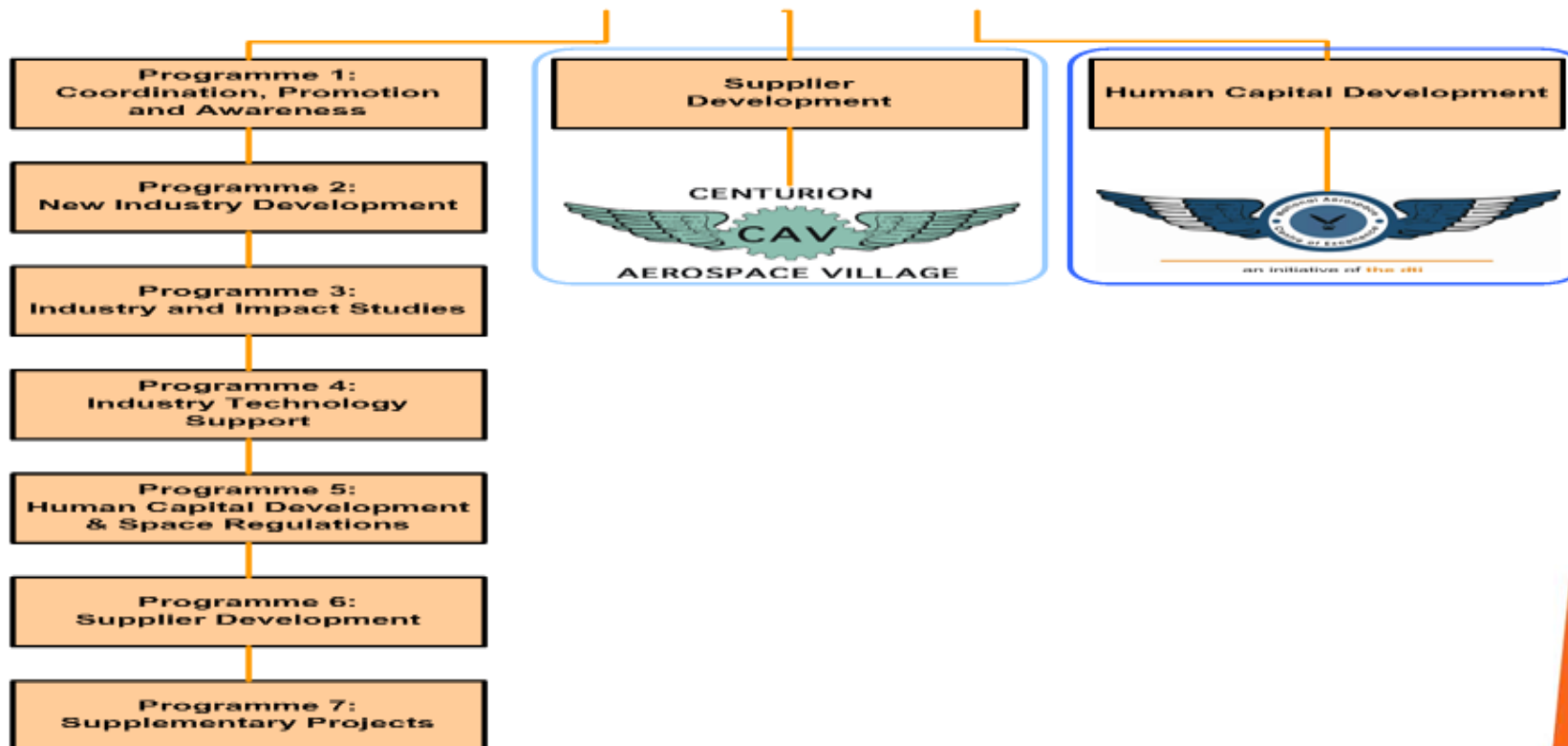
Aerospace Initiatives



Aerospace Industry Support Initiative

an initiative of the dti

CSIR
our future through science

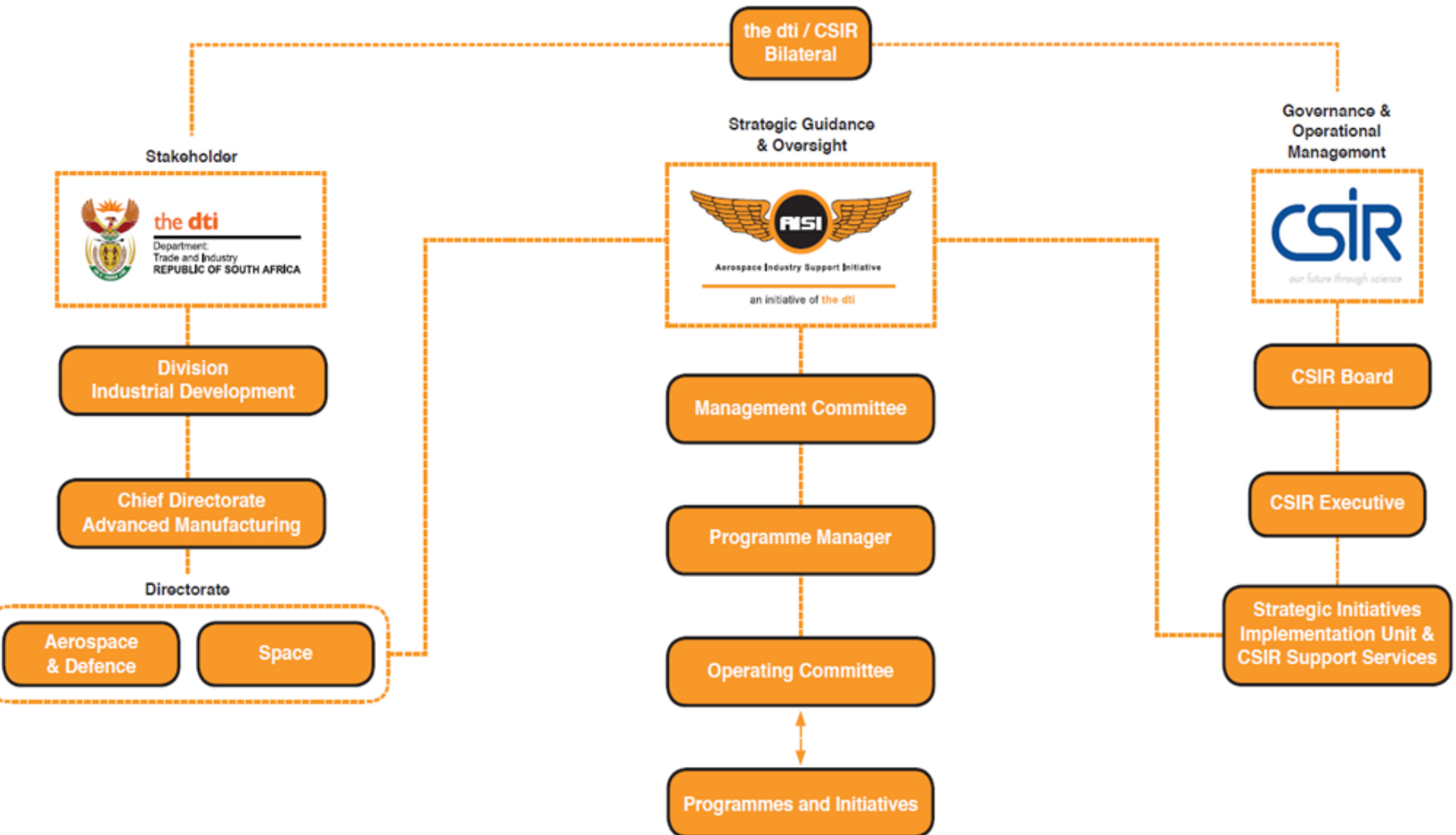




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Aerospace Industry Support Initiative (AISI) Structure





Aerospace Industry Support Initiative

South Africa has an Aerospace sector supported by active collaboration between government, industry, the scientific community and international players. Managed by the CSIR, the Aerospace Industry Support Initiative seeks to ensure industry growth, beneficial partnerships and job creation by bringing together players in this sector – big and small.

These goals are achieved via initiatives aimed at;

- Coordination and streamlining of core activities
- Supporting and enabling firms in these sectors
- Adopt and utilise advanced manufacturing process such as Lean Manufacturing
- Establishing underlying processes and technologies that will benefit all.



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Centurion Aerospace Village

The CAV initiative is based on international best practice where large numbers of SMMEs are integrated in the OEM supply chain by being clustered around the Tier 1 manufacturer such as the one in France using Airbus.



- The CAV was established in mid 2006 as an **outcome** of the AISI supply chain development programme and it will become a world class aeromechanical manufacturing cluster.
- The **concept** of the CAV is to ring fence **sub-tier suppliers** in close proximity to **Tier1** suppliers such as Denel and Aerosud.
- The current focus of this initiative is the development and construction of the Landside.



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National Centre of Excellence

Aerospace Skills Sector Support Programme hosted by Wits University is an industry-related HCD programme providing high tech aeronautical skills required to focus on niche market areas and improve the competitiveness of the industry for its active participation in the global supply chains.

Programmes;

- Bursaries and Sponsorships
- Industry focussed research and development programmes

Thematic Areas;

- Aerospace Manufacturing processes and materials
- Aeronautical Dynamics and control
- Aeronautical design capabilities
- Firm level competitiveness



Aerospace Sector Development Plan

- The development of Sector Development Plan (SDP) was commissioned by the dti and the Department of Science and Technology.
- Among other things, it assessed global best practices in aerospace, at the country level, and identified gaps in the enabling environment for the local aerospace industry. The ASDP proposed that government manage aerospace as a **priority sector**, strengthen South African aerospace clusters, strengthen aerospace skills and development, and set up the Joint Aerospace Steering Committee (JASC).
- The JASC is composed of representatives of government departments, industry, finance institutions and research and development (R&D) agencies.
- The government departments involved are Defence, Public Enterprises, Transport and the National Treasury.
- The interaction between various forums and working groups will create and implement the industry action plan.
- The JASC is currently in process of identifying flagship projects which is a key deliverable of IPAP.



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By sourcing from the SADI ...

- ✓ Reinforce and strengthen relationships with SA as a partner.
- ✓ Improve equipment serviceability, reliability and availability due to proximity to supply.
- ✓ Ensure affordability of equipment due to the SADI's comparative advantage and associated economies of scale.





Industry Capabilities

The local aerospace and defence industry continues to have strong industrial competencies in certain areas;

- **Electronics** – including guidance systems for missiles, gun control systems for vehicles, and fire control systems for artillery. Major capability includes the Design and development of avionics sub-systems for fighter aircraft and attack helicopters.
- **Weapon systems** – including weapons for aircraft, helicopters, ships, artillery and infantry.
- **Communications** – including secure communications, electronic warfare, information warfare, and radar and information technology
- **Protective Systems**



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SADI – A strategic industrial sector

- **Employees** **Approx 15 000**
- **Turnover** **R12.1 billion / annum**
- **Exports** **51% of turnover**
- **Technology Expenditure** **3.4% of turnover**
- **Products**
 - 48% Electronics**
 - 39% Platforms**
 - 13% Logistics**
- **Industrial sub-sectors:**
 - 34% Aerospace**
 - 61.5% Landward**
 - 3% Naval**
 - 1.5% C4I2**





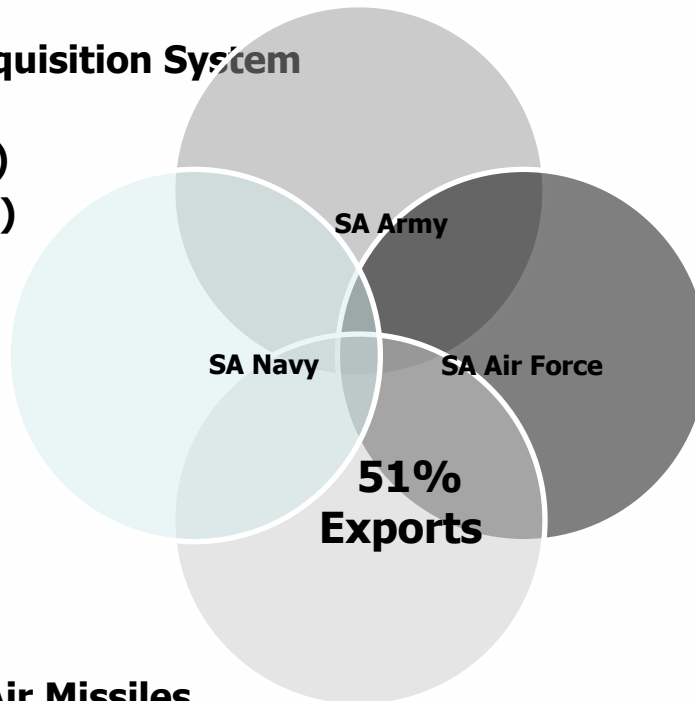
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Supplier to International Customers

Products:

- Vulture Artillery Target Acquisition System (UAV)
- Artillery Systems (G5 / G6)
- C³I² Systems (Radios Incl.)
- EW Systems
- Mi-24 Upgrade
- Mine Protected vehicles /
- APC's / IFV's
- Mirage F1AZ Upgrade
- Seeker UAV System
- SKUA Targeting Drone
- Sensors
- Surface-to-Air and Air-to-Air Missiles
- Training Systems



Customers:

- Algeria
- Brasil
- China
- Canada
- Finland
- Jordan
- Malaysia
- Saudi Arabia
- Slovakia
- Sweden
- Turkey
- UAE
- USA
- AU and UN
- 15 African Defence Forces
- European OEMS
(UK, France, Germany, and Sweden)

SADI: GROWING SUPPLIER IN EXPORT MARKET



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Supplier to the SANDF

SA Army



- Badger Infantry Combat Vehicle
- Casspir, Mamba, Samil Trucks, Olifant Upgrades
- C³I² Systems
- Ground Based Air Defence System
- Ingwe Missiles
- Training Simulators
- Vulture Artillery Target Acquisition System (UAV)

SA Air Force



- A-Darter Missiles (RSA – Brasil)
- A400M Participation
- C³I² Systems
- Gripen Components
- Hawk Navigation & Weapons System
- ORYX Upgrade
- Rooivalk Combat Support Helicopter

SA Navy



- C³I² Systems
- EW Systems
- FSG Frigate – Integrated Combat System.
- Submarine Combat Suite
- Umkhonto missile

Joint

- Integrated Command, Control, Communications and Intelligence Systems
- Wargaming and Simulation

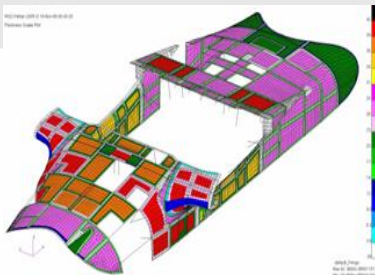


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ITI Contingent

Company	Products
Denel - Aerostructures	Manufacture of composite components ie. WFF, Top Shells
Tellumat	Identification friend or foe, Transponders, Cryptographic computers
Megaray	Portable search light
Imperial Armour	Ballistic and anti-stab Vests
Truvelo Manufacturers	Smalls arms, Security surveillance
Natcom Electronics	Military, security, surveillance, industrial and comm





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ITI Contingent

Company	Products
Aerodyne Research Manufacturing	Parachutes for sport and military production
Byte World	Security software
Rori Marketing Solutions	
Rainy Desert Procurement	GPS Tracking device, access control
Dex Security Solutions	Information technology & data security solutions provider
Desert Charm	Aviation, Air Transport



Interrogators





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Product Application

- **Police ServicesTraffic**
 - **Event Security**
 - **Emergency Services**
 - **Port & Border Security**
 - **Police Services**
 - **Special Forces**
- **Law enforcement**
 - **Tracking and Monitoring**
 - **Surveillance**
 - **Long range target identification**
 - **Situational Awareness**



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Industry Events

- IBSA visit to SA in October
- Ministerial visit in November
- LAAD 2013 (April 2013) - South African National pavilion
 - High level Political Support
- Africa Aerospace & Defence
17-21 September 2014
www.aadexpo.co.za



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Thank you

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