



Space Conference 2024 Aerospace Maritime & Defence

CSIR ICC

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Scope

- ❖ SADI Rationale
- ❖ AMD/SAAMDEC Introduction
- ❖ SADI Overview
- ❖ Industry Challenges
- ❖ Collaboration Opportunities
- ❖ Q&A



SADI Industry Vision- Rationale



- Aerospace and Defence is the **Apex Ecosystem** to ensure a smooth and successful transition to the fourth economic wave (4IR).
- Digital tech (and ICT) is the means by which the apex ecosystem and all others are supported- like electricity in the 3rd Industrial wave, it is the means to transition, not the end.
- Without the technology developed by the industry, we will not transition optimally through the interregnum between the 3rd and 4th waves.
 - We will become technology takers (and price takers)
 - We will be vulnerable to sovereign pressure
 - We will not diffuse competitive technology throughout South Africa industry;
 - Our citizens will not benefit as they must, from the Fourth Economy Wave – inequality and poverty will increase and;
 - We will be less able to protect ourselves

Source: A&D Master Plan, 2020

AMD/SAAMDEC INTRODUCTION



AMD represents the **South African Defence Industries (SADI)**:

- As an Industry Funded Association, serving the common interest of its members;
- Recognised as such by Government and the broader aerospace and defence industry;
- Governed by an elected Board of Directors comprising CEO's of SADI Companies

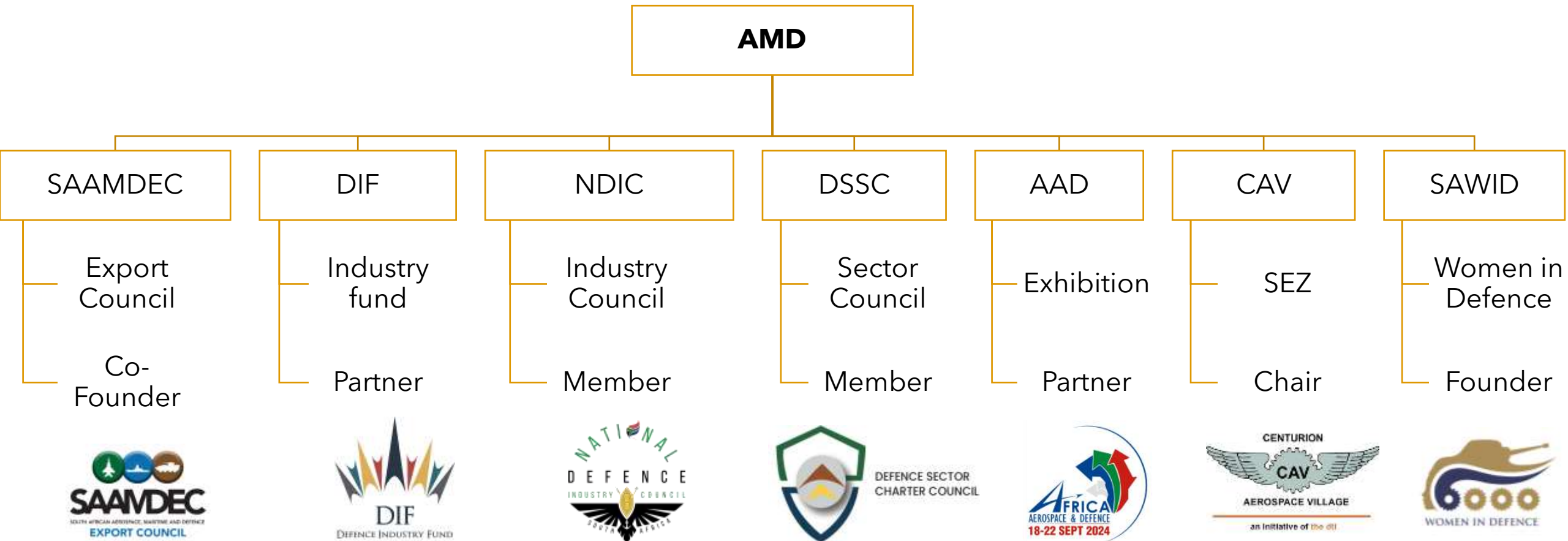
The South African Aerospace, Maritime and Defence Export Council (SAAMDEC) is the only government recognised and supported **Export Council for the Defence and Aerospace Sector**
Established jointly by the dtic and AMD



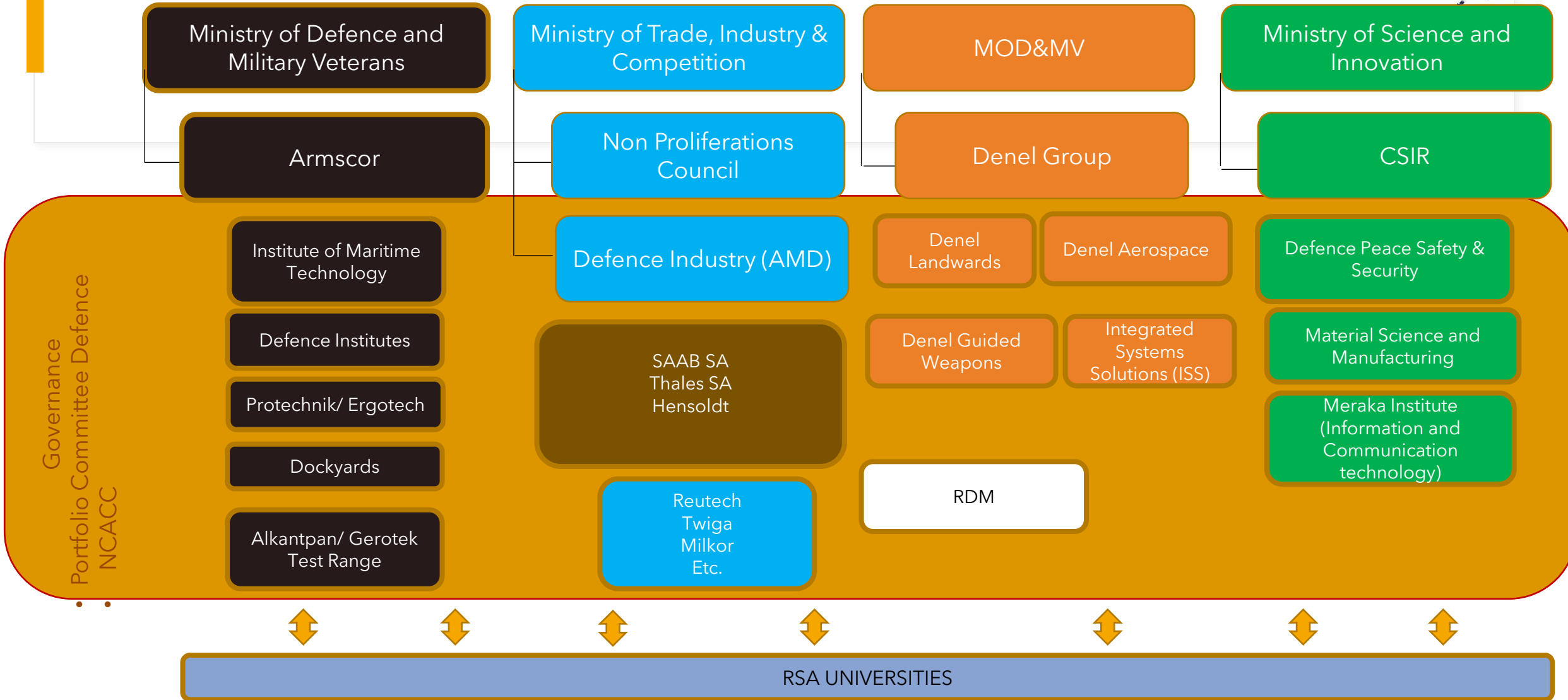
AMD, The Representative Voice of the Defence Industry, as recognised by:



AMD Structures



Defence Industry Ecosystem



AMD/SAAMDEC Members



International Investors

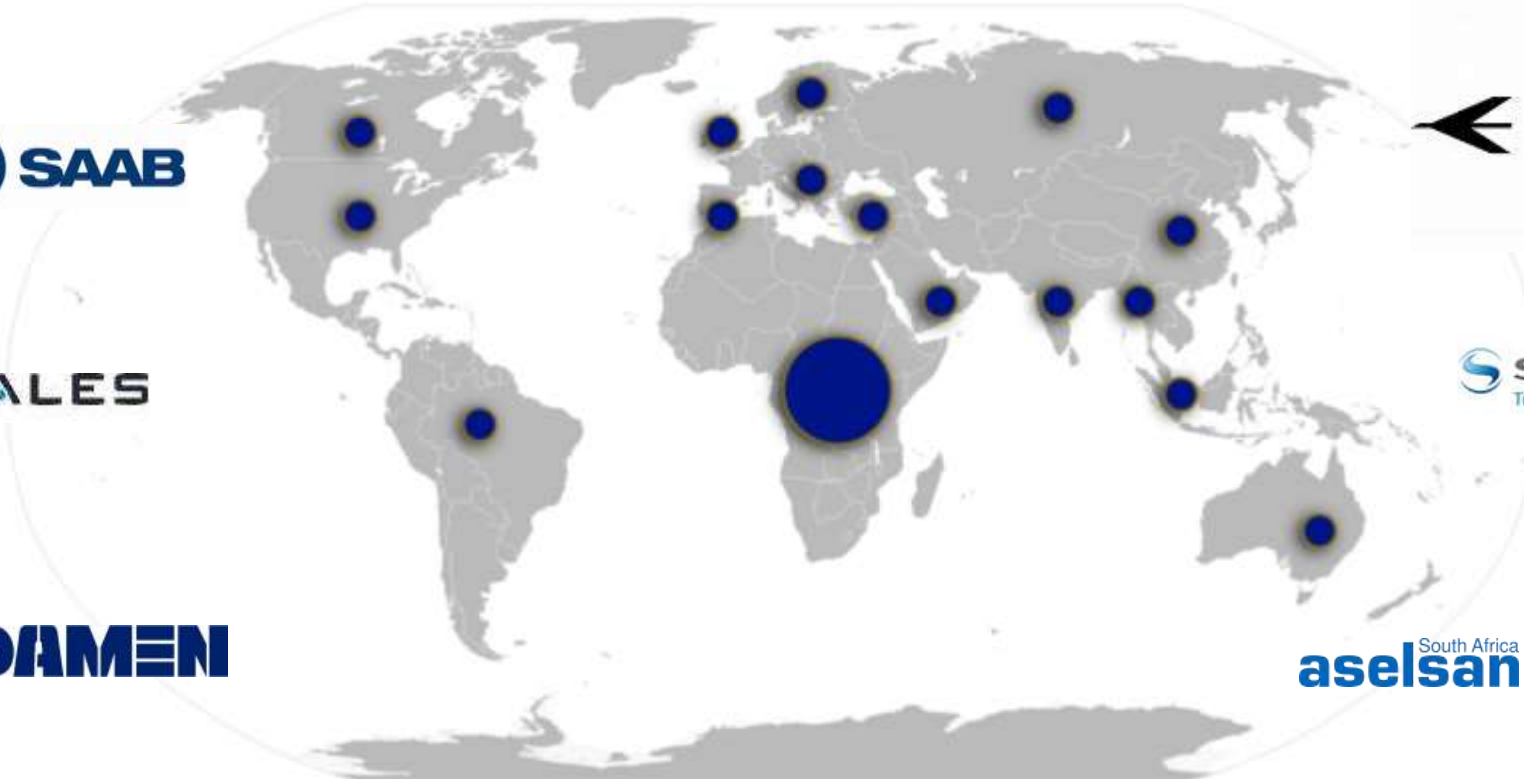


THALES

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SADI Capabilities

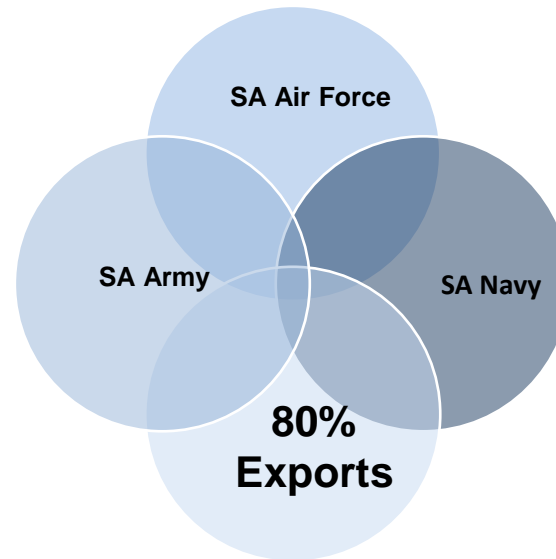


SADI: Supplier to International Customers



Customers:

- Algeria
 - China
 - Canada
 - Finland
 - Jordan
 - Oman
 - Kuwait
 - Malaysia
 - Saudi Arabia
 - Slovakia
 - Sweden
 - Turkey
 - UAE
 - USA
 - AU and UN
 - 35 African Defence Forces
 - European OEMS
(UK, France, Germany, and Sweden)
- India
Thailand
Indonesia
Brazil
Ecuador



SADI: GROWING SUPPLIER IN EXPORT MARKET



Space Committee PoA



Strengthening Collaborations for Enhanced Space Capabilities



❖ Strategic Industry Partnerships:

- ❖ Develop joint ventures and partnerships between local and international aerospace-, maritime-, and defense industries to pool resources, infrastructure, share expertise, and innovate in space technology.

❖ Public-Private Synergy (Partnerships):

- ❖ Foster collaborations between the South African government, state-owned enterprises like Denel , SANSA, DSI, NEOSS, SANDF (SAAF),etc and private sector entities to drive coordinated efforts in space initiatives.

❖ International Collaboration:

- ❖ Engage in international cooperation with various existing space agencies and other emerging space nations to access shared knowledge, data, and technologies.

Alignment with National Goals and SADI Objectives



❖ **Integration with National Development Plans:**

- ❖ Align space initiatives with South Africa's National Development Plan (NDP) 2030, focusing on job creation, innovation, and socio-economic development.

❖ **Policy Coherence:**

- ❖ Streamline policies across the aerospace, maritime, and defense sectors to ensure a unified approach to space capability enhancement.

❖ **Compliance with International Standards:**

- ❖ Adhere to global standards and best practices in space technology development and defense applications to enhance credibility and competitiveness.

Leveraging Existing Infrastructure



❖ Utilizing Existing Assets:

- ❖ Maximize the use of current infrastructure such as the Overberg Test Range, AFB Overberg, Hartebeesthoek, Maaitjiesfontein, Houwteq and other facilities for space-related research and testing.

❖ Modernizing Facilities:

- ❖ Upgrade existing facilities to meet international standards and accommodate the latest technologies in satellite manufacturing, data processing, and space operations. (including Telemetry etc)

❖ Optimizing Local Expertise:

- ❖ Leverage the skills and experience of South Africa's existing aerospace, maritime and defense workforce to build capacity in emerging space sectors.

Technology Development and Testing for Space Capabilities



❖ **Research & Development Focus:**

- ❖ Invest in R&D for locally developed space technologies, including micro- and nanosatellites, Earth observation systems, and space-based communication networks (CaaS, Sovereign and Shared).

❖ **Advanced Testing Facilities:**

- ❖ Develop advanced facilities for testing satellite components, launch vehicles, and other space technologies to ensure safety, reliability, and performance. Creation of ultimately a collaborative space and related technology corridor.

❖ **Innovation and Talent Development:**

- ❖ Establish innovation hubs and talent development programs to support startups and SMEs in the aerospace and defense sectors, focusing on priority areas like remote sensing, AI for space applications, and space situational awareness, big data processing, etc.

Conclusion: Towards a Stronger South African Space Industry



❖ A Unified Approach to Enhancing South Africa's Space Capabilities

- ❖ Unified Vision
- ❖ Strategic Alignment
- ❖ Optimized Infrastructure and Talent
- ❖ Commitment to Growth

"Space exploration is not only a race of rockets but a race of ideas, innovation, and collaboration." - Unknown

