science, technology & innovation
Department:
Science, Technology and Innovation
REPUBLIC OF SOUTH AFRICA

NEOSS
NATIONAL EARTH OBSERVATIONS AND SPACE SECRETARIAT

NEOSS COMMUNITIES OF PRACTICE (CoP) WORKSHOP

Building Momentum, Driving National Uptake in EO and Space

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Director EO , DSTI

EOMI OUTCOMES:
POLICY FRAMEWORK

SA GEO
SOUTH AFRICAN GROUP ON EARTH OBSERVATIONS

SA GSC
SOUTH AFRICAN GROUP ON SATELLITE COMMUNICATIONS

SA GSN
SOUTH AFRICAN GROUP ON SATELLITE NAVIGATION

CSIR
Touching lives through innovation

National EO and Space Strategies

South Africa's EO priorities are anchored in three key strategy documents.

Key content:

- National Space Policy (DTIC)
- National Space Strategy: Aligns space investment with socio-economic needs, including disaster and environmental monitoring
- South African Earth Observation Strategy (SAEOS): Co-ordinate the collection, assimilation, storage and dissemination of EO data; Used for Policy, Decision-making, Economic growth and Sustainable Development; Development of DeSTs, Products and services.

Both strategies ensure EO supports national development goals.

These strategies provide coherence and long-term direction to South Africa's investments in EO and space capabilities.

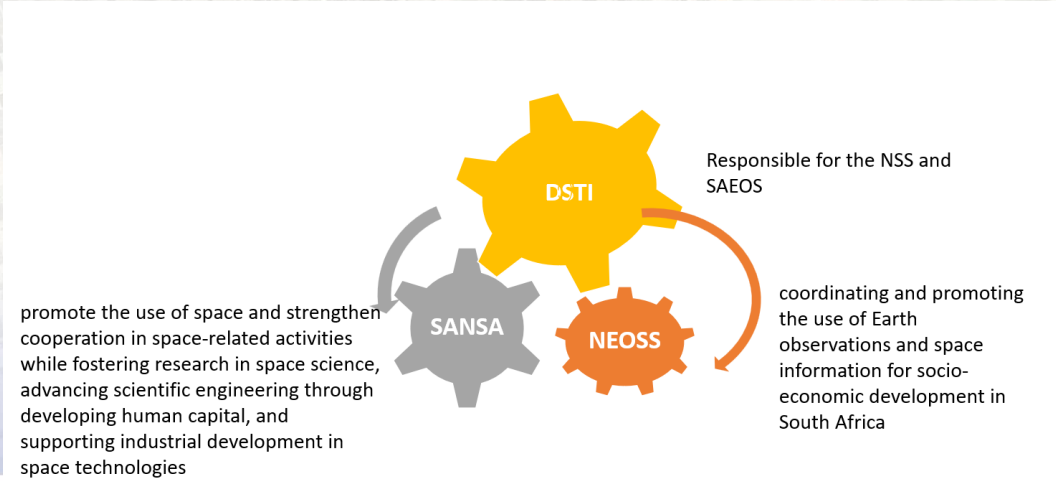
EO Policy and Institutional Framework

South Africa's Earth observation policy landscape is shaped by strong institutions, national strategies, and alignment with global development objectives.

Key content:

- SANSA leads national space science, technology, and innovation efforts.
- NEOSS under DSTI coordinates EO across institutions and aligns with global practices.
- DSTI supports South Africa's EO activities and aligns them with global standards and practices.
- Policies support integration of EO into national development plans and decision-making.

These foundational policies, strategies and coordinating bodies ensure that EO is embedded within South Africa's broader national development agenda.



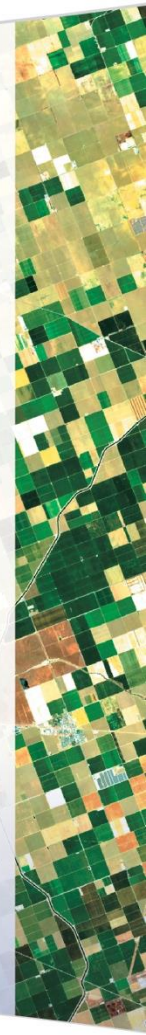
Strategic Priorities for National EO Capacity

South Africa's EO strategies prioritise capacity development, service delivery, and continental cooperation—anchored by SANSA and national partners.

Key content:

- Skills development and training are key pillars of EO sustainability.
- Public sector EO services focus on agriculture, climate resilience, disaster preparedness & response; and human settlements.
- SANSA advances regional partnerships to enhance African EO integration.
- SANSA acquires, processes and disseminates satellite imagery to government & other end-users

These priorities help position South Africa as a regional EO hub with strong internal capacity and outward collaboration.



Economic Inclusion in the EO Sector

The South African EO sector promotes inclusive innovation, with SANSA and government departments working to support local industry.

Key content:

- SANSA earmarks 30% of operational expenditure for SME participation.
- DSTI and industry partners promote EO-based enterprise development.
- Public procurement helps integrate EO startups into service delivery.

This inclusive approach ensures EO benefits extend to emerging innovators, entrepreneurs, and historically underserved groups.

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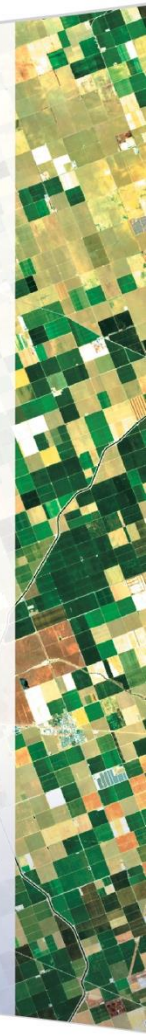
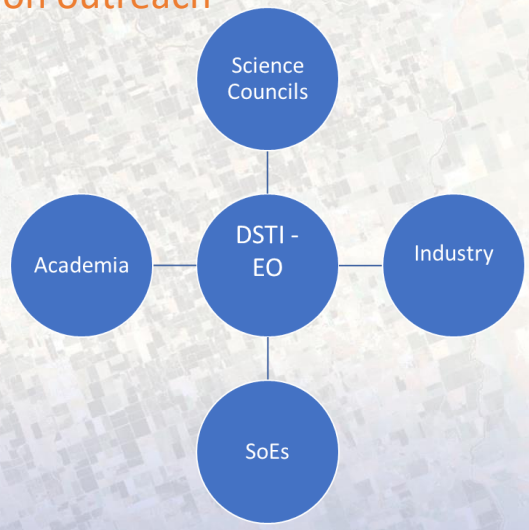


Key Government and Science Institutions

A network of public institutions contributes to EO policy implementation and operationalisation.

Key content:

- CSIR: EO R&D applied to urban planning, environment, innovation.
- NRF: Research support and funding platforms for space science
- SAEON: focusing on environmental observation, data management and education outreach
- SAWS: Uses EO data for forecasting, early warning, and agriculture.
- DFFE: Applies EO in forestry, marine, biodiversity and environmental monitoring.



Together, these institutions provide the technical backbone and applied policy interfaces for South Africa's EO ecosystem.

Line Departments Applying EO

Line departments increasingly use EO for planning, compliance, and service delivery.

Key content:

- Dept. of Agriculture and Dept of Land Reform and Rural Development (DALRRD): EO for spatial planning and sustainable agriculture.
- Dept. of Water and Sanitation: Monitors water quality, resources, and sanitation services with space-based data.
- EO mainstreamed into national disaster response and rural development programmes.
- StatsSA, DoHS etc

These departments illustrate how EO is becoming an indispensable tool for integrated service delivery and resource management.

EO Contributions to SDG Monitoring

EO supports South Africa's SDG monitoring through collaboration between SANSA, STATSSA, and other line departments.

Key content:

- EO-derived indicators support SDG goals on water, food, health and urban development.
- SANSA maintains base layers on human settlements, vegetation, and hydrology.
- Partnerships help produce consistent, geospatially anchored data.

This strengthens South Africa's ability to report accurately and develop policies that advance sustainable development

SDG Working Group Coordination

South Africa's EO institutions, including SANSA, actively contribute to SDG data governance through national working groups.

Key content:

- EO actors support STATSSA-led SDG sectoral working groups.
- Integration of geospatial and statistical data improves indicator robustness.
- Emphasis is placed on spatial disaggregation and data quality.

These collaborations make South Africa a regional leader in integrating EO with statistical systems for sustainable development.

Regional and Continental Partnerships

South African institutions, including SANSA and NEOSS, contribute to key African EO partnerships to expand data access and capacity-building.

Key content:

- MoUs (bilaterals and multilaterals) with a number of regional and international partners support data sharing, products and services development and SAR development.
- South Africa contributes to GMES & Africa, GEO, CEOS, UNCOPOUS etc.
- Regional initiatives enhance EO infrastructure, applications, and skills across the continent.

These initiatives enhance continental EO cooperation, with South Africa playing a leadership and enabling role.

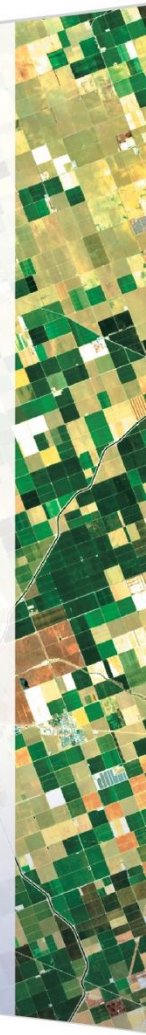
Engagement in Global EO Systems

South Africa, through SANSA and DSTI, is an active contributor to global EO coordination platforms.

Key content:

- Participation in GEO, CEOS, and BRICS EO Working Groups etc.
- South Africa influences global EO standards and benefits from shared missions.

Global partnerships strengthen South Africa's scientific visibility and enable access to diverse data sources.



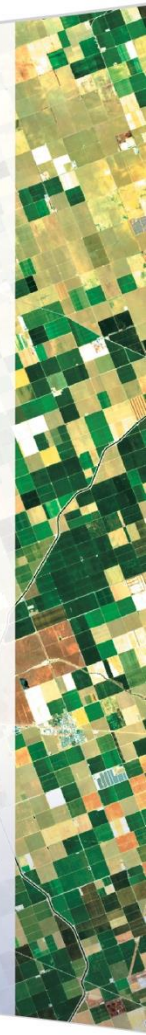
Bilateral and European EO Projects

South Africa leverages bilateral partnerships and EU-supported programmes to deliver local EO solutions.

Key content:

- SCO Charter and China-Africa Centre support monitoring and training.
- Digital Earth SA (DESA) leverages Copernicus and Sentinel data.
- Ongoing use of EO for invasive species, drought risk, and land productivity.

These projects bridge global EO capabilities with South African priorities in environment and service delivery



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Thank You

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SOUTH AFRICAN GROUP ON EARTH OBSERVATIONS

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SAOGSN
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Policy Maturity and Opportunities

South Africa's EO policy environment reflects mature coordination, inclusive strategy, and global alignment.

Key content:

- Coherent institutional roles: DSTI (policy), NEOSS (coordination), SANSA (operations).
- Strategic use of EO for inclusive growth and SDG tracking.
- Deep engagement in Africa and multilateral EO initiatives.
- Budget and EO data sharing limited.

Sustained investment and inter-agency collaboration will ensure EO continues to advance South Africa's development, resilience, and leadership.