

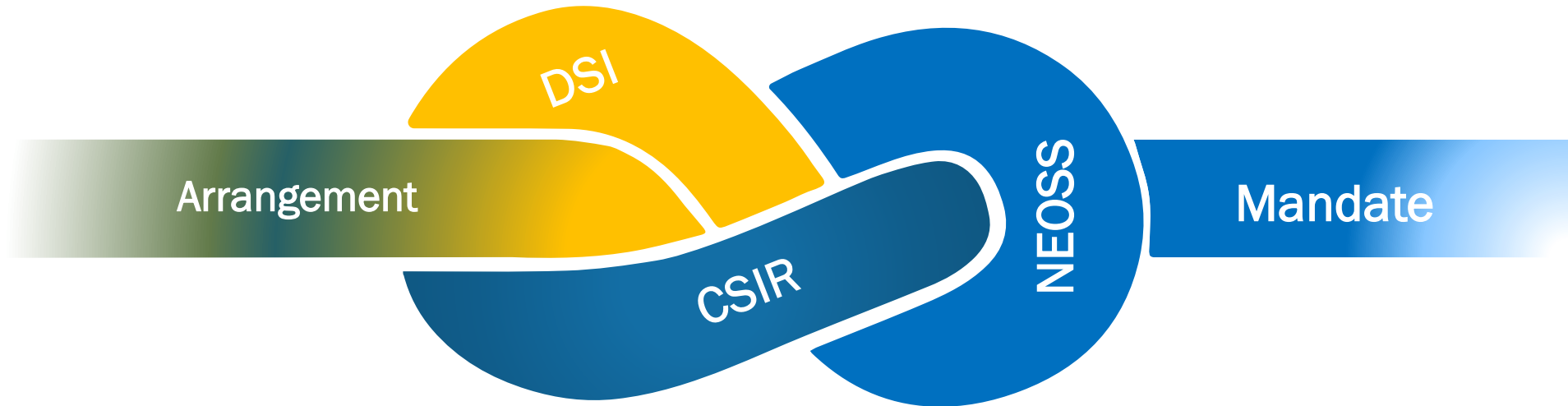
A satellite with solar panels is shown in orbit against a clear blue sky, with a faint beam of light directed towards the ground.

SA-GEO , a National Coordination Mechanism

A wide-angle landscape photograph showing rolling orange sand dunes in the foreground and middle ground, leading to a bright blue ocean with white surf on the right side. A satellite dish is visible in the bottom left corner.

**Adv Lulu Makapela
National Earth Observations
and Space Secretariat**

About NEOSS and SAGEO



Established in 2009, by the DSI and hosted by the CSIR

A programme and Not a legal Entity

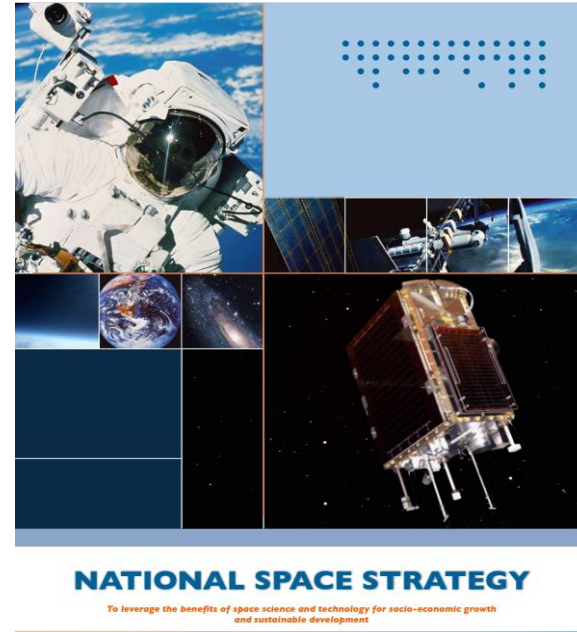
A national **coordination and engagement framework** for EO and Space activities in South Africa.

Policy Frameworks



SA Earth Observation Strategy (2007):

“To coordinate the **collection, assimilation and dissemination** of earth observations to support policy, decision-making, economic growth and sustainable development.



National Space Science and Technology Strategy (2008):

“**Use** of S&T to provide essential data and services to support a wide range of applications, for decision making and socio-economic **benefit**.”



National Space Policy (2008):

“Peaceful **Use** of outer space for the **benefit** of All”

International Frameworks



SAGEO a founding Member
of GEO and AfriGEO



SAGEO Participation in GEO
and AfriGEO structures, also
lead Co-Chair



SAGEO participation in the
GEO work programme



SAGEO Participation in the
GEO Post 2025 Strategy

Mandate

- ❑ To serve as a national framework to
 - ❑ support the co-ordination of the DSI National Strategies (EO, Satellite Communications and Navigations)
 - ❑ provide the platform or networks for the EO Community to engage and collaborate
 - ❑ promote integrated use of Earth Observations
 - ❑ Promote data sharing
 - ❑ Contribute to or Identify user needs, gaps in data, meta data and products, and advocating for them to be addressed.
 - ❑ Support SA Contribution, involvement and benefit in GEO and GEOSS



Locally relevant,
globally connected



SA main role players

- **Data collection and supply** , (SANSa, SAWS, ARC, NGI)
- **Data analysis, integration & Value add** , (Res Councils, Univ, private sector)
- **Users (Beneficiaries and Decision makers**-All tiers of Govt, Industry, NGO's, Society etc)
- **Co-ordination structures** (NEOSS / SA-GEO /GEO/AfriGEO etc.)

Coordination and Governance

GEO Principal/Funder

- GEO Lead Co-Chair 2023, Executive Committee
- GEO Africa Caucus Chair
- GEO Programme Board 2022-2024
- GEO Work Programme-2023-2025
- GEO Budget Committee
- GEO Ministerial Summit Committee

internal

Secretariat/s

- NEOSS**
 - SA-GEO-Earth Observations
 - SA-GSC- Satellite Communications and
 - SA-GSN –Satellite Navigations
 - AfriGEO Initiative

Committee/s

- MANCO**
 - Management oversight of the Implementation of the NEOSS Agreement
- SACOM**
 - Oversees the development of **strategies** and policies that promote best practices for the communities

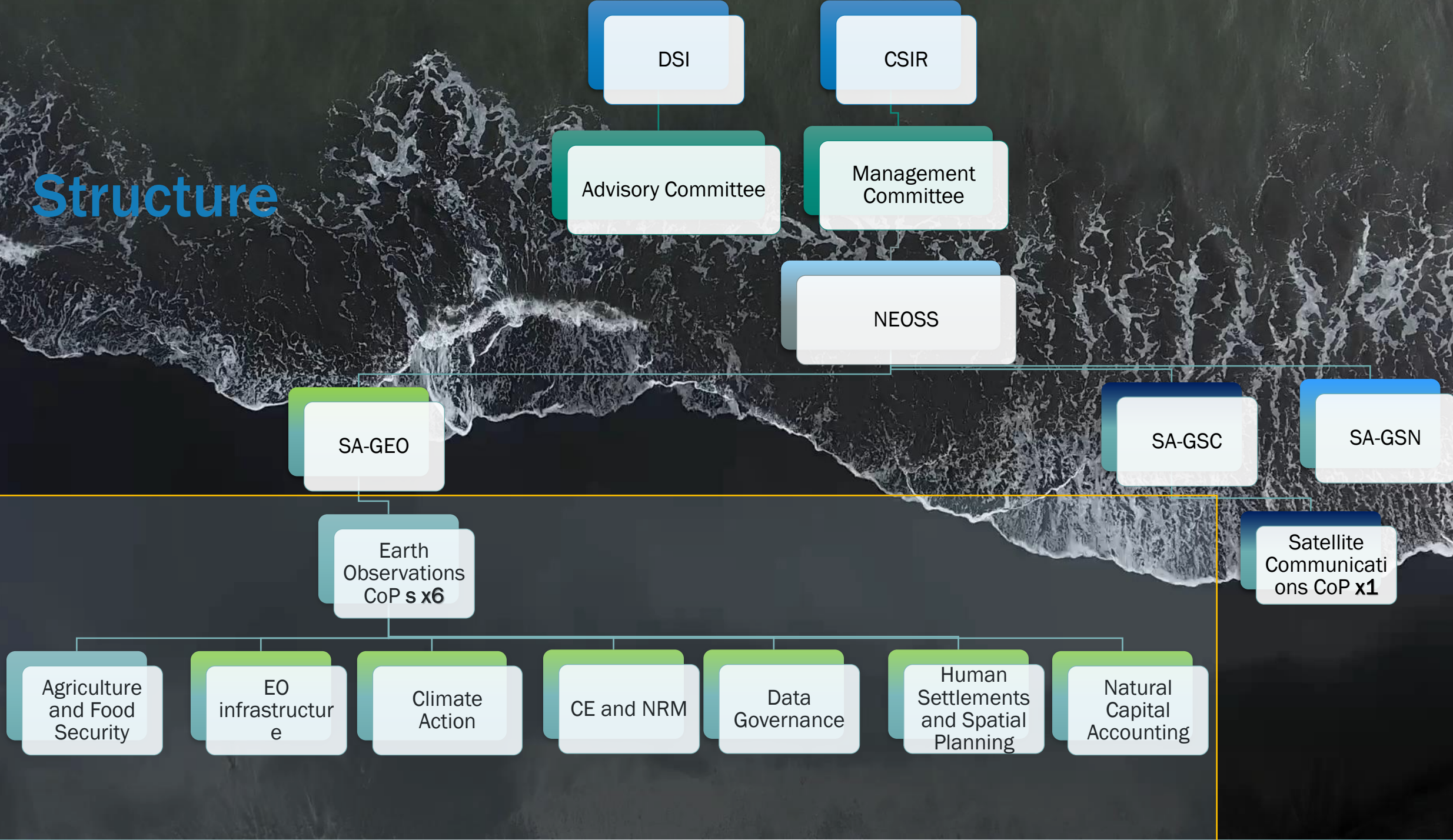
External

Communities of Practice (CoPs)/Stakeholders

- Agriculture and Food Security
- Circular Economy & Natural Resources Management
- Climate Action
- Data Governance
- Earth Observations Infrastructure
- Satellite Communications and Navigations
- Human Settlements and Spatial Planning
- Natural Capital Accounting

- Appointed Co Chairs

Structure



Characteristics of a Community of Practice (CoP)

voluntary

self-organizing

many kinds of
members

based on trust

sharing of best
practices in
reusable
knowledge base

require more
than just
discussions -
Deliverables.

“A group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.”

Communities of Practice

Agriculture and Food Security

sharing best practice to support decision making processes in Agriculture and identify current or propose new initiatives for uptake by the community.

Climate Action

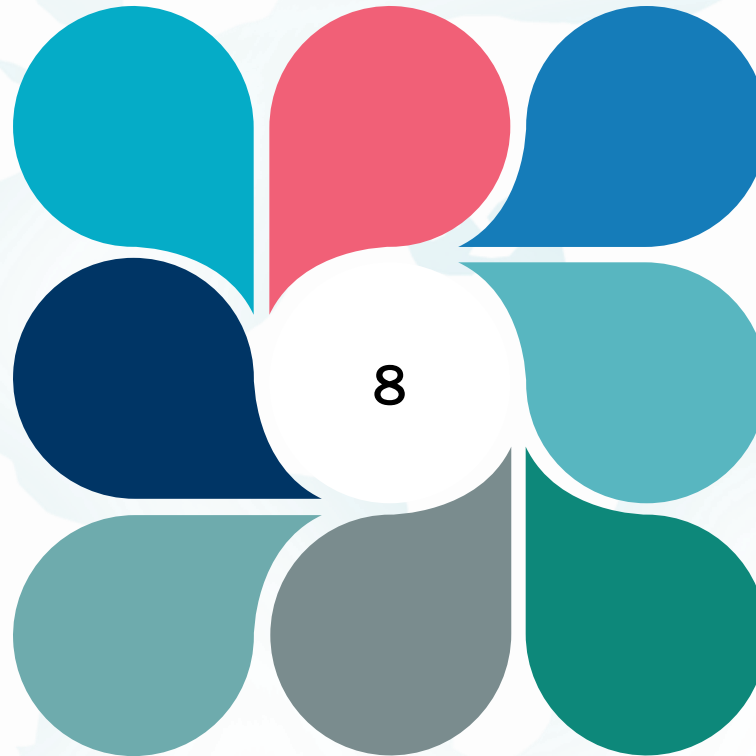
Sharing of ideas and information to encourage mainstreaming of adaptation into decision making frameworks

CE & Natural Resources Management

creating knowledge and understanding of circular economy models/research and use of Earth Observations and satellite data or technologies to support efficient management and monitoring of natural resources

Data Governance

promoting open data and developing general principles for facilitating and enhancing access to and the uptake of earth observation data and formation by a wide range of user communities,



EO Infrastructure

promoting the current efforts and activities leading towards the integration, harmonization, interoperability and dissemination of data, derived products and services and decision support systems activities, through utilization of relevant data infrastructures.

Satellite Communications and Navigations

To facilitate identification, discussion, and prioritization of a framework for addressing satellite communications requirements including independent access requirements for the benefit of South Africa

Human Settlements and Spatial Planning

Advocate the value of Earth observations, engage communities and deliver data and information in support of **Sustainable Urban Development**

Natural Capital Accounting

to obtain a better understanding of the state of the art of applying earth observation to the measurement of ecosystem accounting to monitor the extent and condition of their ecosystems

NEOSS Strategic Advisory Committee (SACOM)

NEOSS Strategic Advisory Committee

Dr Mary-Jane Bopape
Managing Director:
South African Environmental
Observation Network
National Research Foundation (NRF)

Mr Sives Govender
Research Group Leader
Next Generation Enterprises
and Institutions
Council for Scientific and
Industrial Research (CSIR)

Mr Peter John Lukey
Chief Director:
Environmental Knowledge and
Information
Department of Forestry Fisheries
and the Environment (DFFE)

Ms Asanda Nombulelo Dawn Sangoni
Space & Stakeholder
Liaison Specialist
South African National Space
Agency (SANSA)

Mr Elliot Sibeko
Director:
Space Affairs
Department of Communications and
Digital Technologies (dcdt)

Dr Winifred Jordaan
Senior Manager:
Regional Training Centre and
Head of the Centre of
Excellence for Satellite Training
South African Weather Services (SAWS)



Elhadi Adam
Earth Observation
Infrastructure



Kershani Chetty
Circular Economy
and Natural
Resources
Management



Ndiliza Didiza
Agriculture and Food
Security



Martin Jacobs
Agriculture and Food
Security



Athina Kenned
Climate Change



**Tshisikhawe
Mphahfuli**
Earth Observations
Infrastructure



Jessie Ndaba
Satellite
Communications
and Navigation



Patrick Ndlovu
Satellite
Communications
and Navigation



Phetole Sekhula
Data Governance



Phila Sibandze
Circular Economy
and Natural
Resources
Management



**Integrated use of
EARTH observations
for Socio-Economic and
environmental benefit of
South Africa**

Communities of Practise (CoP) Co- Chairs

Implementation activities

❑ Coordination

EO community through development of **action plans, support platforms** (Information and Data) and **COP structures** to support response **to national and continental priorities** and challenges (i.e food security, access to water and sanitation, water resource management, disaster management, natural resource degradation, coastal and marine management, energy and resource management)

❑ Collaboration

with key government departments at all levels and agencies , private industry, research and non-government organisations to participate in the COPs and make data available and support the development of initiatives to support and benefit the community.

❑ Engagement

with the diverse community of EO users, to understand the landscape, user needs and the relevant available products and services.

❑ Resource Mobilisation

through collaborative efforts, provide support for targeted priority innovative solutions and community-led initiatives, to respond to national and continental challenges

Highlight Achievements

- ❑ Establishment of CoPs in various SBAs and linking them to AfriGEO, GEO Work Programme
- ❑ Establishment of Platforms and Tools (Networks, data, Information and knowledge resources i.e., NEOSS integrated Information and networking Platform, social media, videos, CoP Meetings, NEOSS M&E System,)
- ❑ Collaboration with SANSA on the National Space Conference Event and National EO capability development through NEO Frontiers
- ❑ Developing CoP Strategy and workplan , with focused areas of engagements for the next 3 years
- ❑ Capacity building opportunities, sharing knowledge and expertise including youth, women and SME participation.



CoP Integrated Workshop, 30 May 2023



Earth observations to address social and environmental challenges

COMMUNITIES OF PRACTICE (CoP) INTEGRATED WORKSHOP

30 May 2023 | 08h30 – 18h00



NATIONAL SPACE CONFERENCE

HIGHLIGHTS

SPACE FOR INCLUSIVE
GROWTH

www.spaceconference.co.za



30 August to 01 September 2023



CSIR ICC, Tshwane, Pretoria, South Africa



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Registrations (EDI)

NEOSS High Level MANCO Overview | CSIR NEOSS

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NEOSS High Level MANCO Overview

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Engagement Participants

441

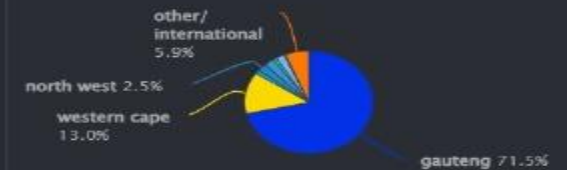
Engagement Participant Age



Engagement Participant Gender



Engagement Participants Location



+ Task





NATIONAL EARTH OBSERVATIONS AND SPACE SECRETARIAT

@Neoss2023 22 subscribers 20 videos

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NEOSS is an initiative of the South African Department of Science and Inn... >

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2023 Day 3 Pt3

9 views • 3 days ago



National Space Conference
2023 Day 1 Highlight

12 views • 4 days ago



National Space Conference
2023 Day 2 Pt1

17 views • 4 days ago



National Space Conference
2023 Day 2 Pt2

41 views • 4 days ago



National Space Conference
2023 Day 2 Pt3

12 views • 4 days ago

What we aim to achieve

- ❑ Enhanced capacity to access, use and manage EO data and Information (organisational and individual level)
- ❑ EO data that is described properly, preserved properly, discoverable and accessible, automatically, through national platforms
- ❑ Reduced duplication of efforts among organisations, programmes, initiatives, and activities
- ❑ Diverse participation of women, youth and SMEs
- ❑ Progress towards Sustainable development goals



Data Infrastructure and access



The screenshot displays the homepage of the South African Earth Observation System (saEOS). The interface features a blue header bar with navigation links: [Spatial Search](#), [Site Map](#), [Log In](#), and [Register](#). On the right side of the header, there is a search box labeled "Search Site" with a red "Search" button and a checkbox for "only in current section".

The main content area includes a globe icon with a blue ribbon that says "Beta Version". To the right of the globe is the "saEOS" logo, where "sa" is in green and "EOS" is in blue. Below the logo, the text "South African Earth Observation System" is displayed. To the right of the saEOS logo is the logo of the Department of Science and Technology, Republic of South Africa, which includes the national coat of arms and the text "science & technology", "Department of Science and Technology", and "REPUBLIC OF SOUTH AFRICA".

At the bottom of the page, there is a horizontal menu with buttons for [Home](#), [Search](#), [Stakeholders](#), [Catalogues](#), [Data Samples](#), [Documentation](#), and [Communities](#). A breadcrumb trail at the very bottom left indicates "You are here: [Home](#)".

NEOSS in numbers



PROVINCES -9



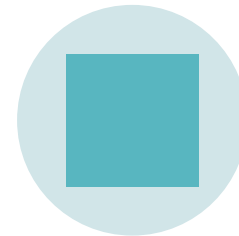
MEMBERS -219



ORGANISATIONS -14



PRIVATE SECTOR -19



GOVERNMENT
DEPARTMENTS - NATIONAL
AND PROVINCIAL -16

Programmes

Community Building Support
Networks

- 8 x Communities of Practice

Community Integrated Support
Platforms

- 2x Platforms , NB SAEOS with SANSA

IEOS Collaboration

- Capacity Building Support
- Collaborative Projects
- Community Initiatives

GEO and AfriGEO Involvement

- Participation in GEO Flagships , Initiatives and Working Groups

CoP work-plans

CoPs	Research and Surveys	Information Knowledge Resources (Tools/platforms /tech)	Guidelines /standards /policy recommendations	Capacity building /training /Advocacy	User requirements	Collaboration		
						CoP	Organisations	GEO/International
<i>Agriculture and Food Security</i>	Identification of existing capability ,capacity /initiatives	Decision support tools in agriculture and Food Security	_____	Tools to support agriculture applications i.e training on Crop monitoring /GEO GLAM	Gap Analysis	CA, CE and NRM, DG and EO infrastructure	SANSA, DFFE, ARC, DALLRD, Research and academic institutions, private Sector	GEO Glam, JECAM, GEOBon, Crop-watch SDG's
<i>Climate Action</i>	Identification of existing capability ,capacity /initiatives	Decision support Tools for Climate Action mitigation and response	Guidelines on use of EO for Climate Change	Climate Action Advocacy	_____	AFS, CE and NRM, DG, HS &SP and EO infrastructure	SAWS, NDMC, DEA, Research and academic institutions, private Sector	GEO Glam, IPCC, AIMIS
<i>Circular Economy and NRM</i>	Best Practices on CE approaches	Decision support tools for Natural Resources Management	_____	Training on CE	_____	AFS, CA, DG and EO infrastructure, SC&N	DFFE, DALLRD, SANBI, CGS, CSIR, NDMC, Research and academic institutions, private Sector	GEOBON SDG's
<i>Data Governance</i>	Best Practices on data sharing	_____	Open data policy recommendations	Training on open data i.e GEO open data workshop	_____	AFS, CA, CE and NRM, HS&SP and EO infrastructure	CSI and all data custodians	GEO data WG, CEOSS data WG
<i>EO Infrastructure</i>	Identification of available infrastructure	Decision Support System /Contribution to SAEOS /SANSA	_____	Training on EO infrastructure i.e GEO Knowledge Hub	_____	AFS, CA, CE and NRM, HS&SP DG and SC&N	CSI and all data infrastructure owners (SDI, SANSA, SABS etc.) Research and academic institutions, private Sector	GEOSS, ESA, DEA
<i>Satellite Communications and Navigations</i>	_____	Precision navigation	Satellite Communications policy recommendations	Training on Comms and Nav i.e DUT CNS Workshop	_____	AFS,CE&NRM,DG	Dtps, ICASA, DSI, Research and academic institutions, private Sector	ITU
<i>Human Settlements and Spatial Planning</i>	_____	Decision support tools for spatial planning	_____	_____	_____	AFS, CA, CE and NRM, DG, HS &SP and EO infrastructure	SANSA, municipalities Research and academic institutions, private Sector	GEO
<i>Natural Capital</i>	NCA Practices	_____	NCA Guidelines	Training on NCA	_____	AFS, CA, CE and NRM, DG,	Research and academic	GEO

Events

30 May 2023 : CoP
Integrated Workshop
(in person)

13 - 14 Jun 2023: GEO
Symposium in Geneva

15-16 June 2023: Open
Data & Open Knowledge
workshop in Geneva

30 August- 01
September 2022:
National Space
Conference at CSIR ICC
Pretoria (**Collaboration**)

18-22 September 2023
: AfriGEO Symposium

27 October, 2023: EO
Stakeholder
Engagement Workshop
(Collaboration with
SANSA)

06-10 November 2023:
GEO Week, Plenary and
Ministerial in Cape Town:

December 2023 , side
event at the Science
Forum

February 2024 , CoP
Training sessions

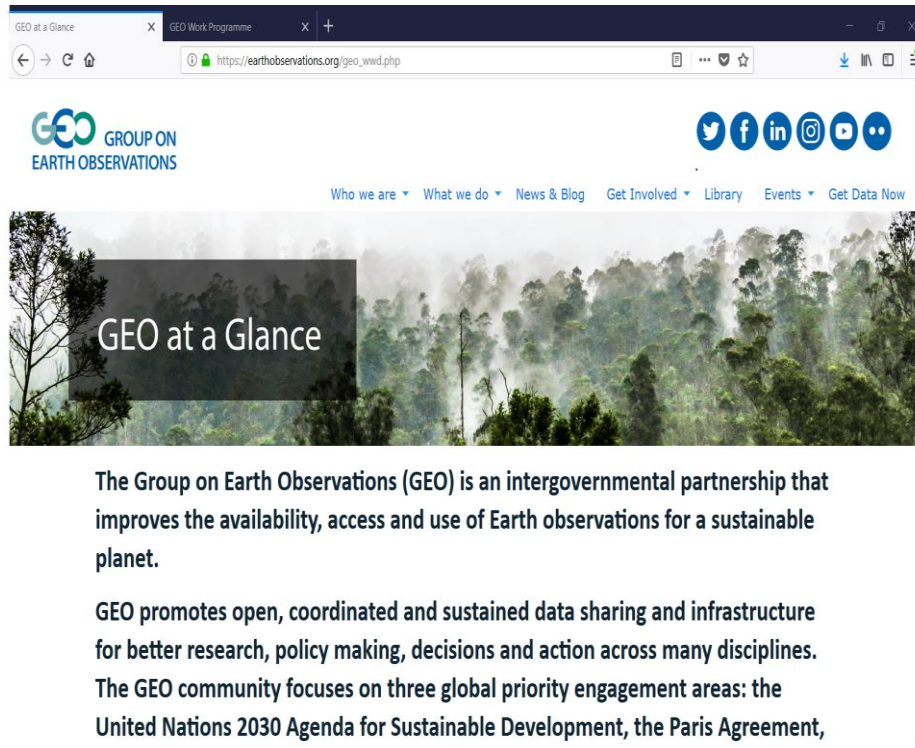
CoP engagement
sessions , as and when
required



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GEO , AfrigEO, SAGEO



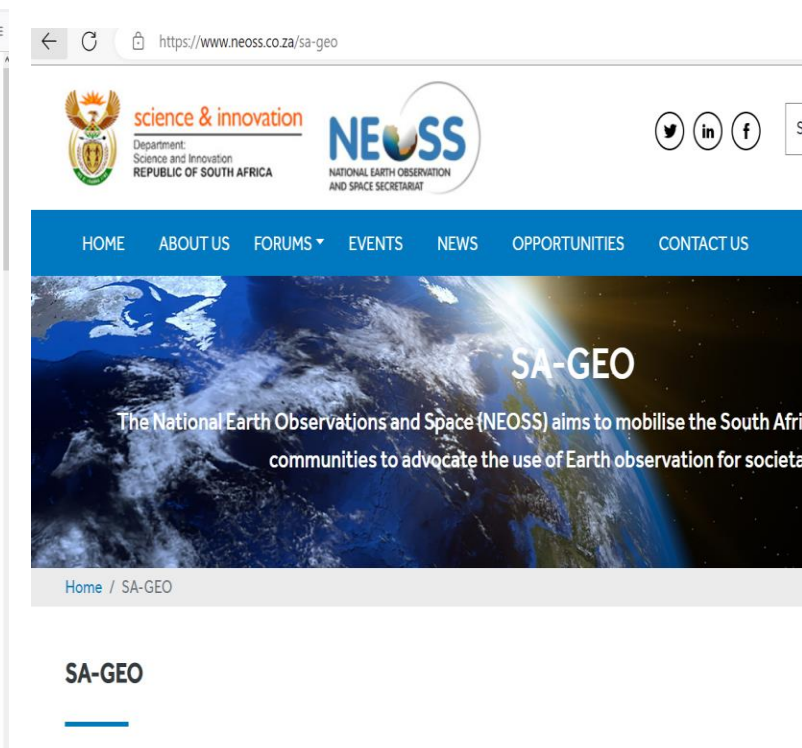
The screenshot shows the GEO website home page. The header includes the GEO logo and navigation links. A large banner image of a forest is titled "GEO at a Glance". Below the banner, the text reads: "The Group on Earth Observations (GEO) is an intergovernmental partnership that improves the availability, access and use of Earth observations for a sustainable planet. GEO promotes open, coordinated and sustained data sharing and infrastructure for better research, policy making, decisions and action across many disciplines. The GEO community focuses on three global priority engagement areas: the United Nations 2030 Agenda for Sustainable Development, the Paris Agreement,"

https://earthobservations.org/documents/gwp_20_22/gwp2020_summary_document.pdf



The screenshot shows the AfrigEO website. The header includes the AfrigEO logo and navigation links. The main heading is "AfrigEO: The African Group on Earth Observations". Below this, the "Overview" section states: "The African Earth Observation community is continuously growing and is establishing its presence in the region and in the global arena, taking also benefit from the national and regional programs and from the on-going cooperation initiatives with a great number of external Partners. The AfrigEO initiative, developed within the GEO framework, will strengthen the link between the current GEO activities with existing capabilities and initiatives in Africa and will provide the necessary framework for countries and organizations to access and leverage on-going bilateral and multilateral EO-based initiatives across Africa, thereby creating synergies and minimizing duplication for the benefit of the entire continent. This coordination initiative has been recognized essential to enhance Africa's capacity for producing, managing and using Earth observations, thus also enabling the Region's participation". A logo for "AfrigEO Earth Observations for Africa" is also visible.

<https://www.earthobservations.org/afrigeo.php>



The screenshot shows the SA-GEO website. The header includes the South African Department of Science and Innovation logo and the NEOSS logo. The main heading is "SA-GEO". Below this, the text reads: "The National Earth Observations and Space (NEOSS) aims to mobilise the South African communities to advocate the use of Earth observation for societal benefit". A navigation menu includes links for HOME, ABOUT US, FORUMS, EVENTS, NEWS, OPPORTUNITIES, and CONTACT US. A "Home / SA-GEO" breadcrumb is also present.



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Thank you Questions?