SA-GEO, a National Coordination Mechanism

Adv Lulu Makapela
National Earth Observations and Space Secretariat

Earth Observation for Africa's Prosperity
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.
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
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

<table>
<thead>
<tr>
<th>GEO Principal/Funder</th>
<th>Secretariat/s</th>
<th>Committee/s</th>
<th>Communities of Practice (CoPs)/Stakeholders</th>
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<tbody>
<tr>
<td>GEO Lead Co-Chair 2023, Executive Committee</td>
<td>NEOSS</td>
<td>MANCO</td>
<td>Agriculture and Food Security</td>
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<tr>
<td>GEO Africa Caucus Chair</td>
<td>SA-GEO-Earth Observations</td>
<td>SACOM</td>
<td>Circular Economy &amp; Natural Resources Management</td>
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<tr>
<td>GEO Programme Board 2022-2024</td>
<td>SA-GSC-Satellite Communications and</td>
<td>Management oversight of the Implementation of the NEOSS Agreement</td>
<td>Climate Action</td>
</tr>
<tr>
<td>GEO Work Programme-2023-2025</td>
<td>SA-GSN-Satellite Navigations</td>
<td>Oversees the development of strategies and policies that promote best practices for the communities</td>
<td>Data Governance</td>
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<tr>
<td>GEO Budget Committee</td>
<td>AfriGEO Initiative</td>
<td></td>
<td>Earth Observations Infrastructure</td>
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<tr>
<td>GEO Ministerial Summit Committee</td>
<td></td>
<td></td>
<td>Satellite Communications and Navigations</td>
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</table>

**Internal**

- 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

**External**

- Appointed Co Chairs
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
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.
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
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
NEOSS in numbers

- Provinces: 9
- Members: 219
- Organisations: 14
- Private Sector: 19
- Government Departments: National and Provincial: 16
## Programmes

<table>
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<th>Programmes</th>
<th>Details</th>
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<td>Community Building Support Networks</td>
<td>• 8 x Communities of Practice</td>
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<tr>
<td>Community Integrated Support Platforms</td>
<td>• 2x Platforms, NB SAEOS with SANSA</td>
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<tr>
<td>IEOS Collaboration</td>
<td>• Capacity Building Support</td>
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<td>• Collaborative Projects</td>
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<td>• Community Initiatives</td>
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<td>GEO and AfriGEO Involvement</td>
<td>• Participation in GEO Flagships, Initiatives and Working Groups</td>
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<tr>
<td>CoP</td>
<td>Research and Surveys</td>
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<td>Agriculture and Food Security</td>
<td>Identification of existing capability, capacity initiatives</td>
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<td>Circular Economy and NRM</td>
<td>Best Practices on CE approaches</td>
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<tr>
<td>Data Governance</td>
<td>Best Practices on data sharing</td>
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<td>EO Infrastructure</td>
<td>Identification of available infrastructure</td>
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<td>Satellite Communications and Navigations</td>
<td>Precision navigation</td>
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<td>Human Settlements and Spatial Planning</td>
<td>Decision support tools for spatial planning</td>
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<td>Natural Capital</td>
<td>NCA Practices</td>
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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

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

30 August- 01 September 2022: National Space Conference at CSIR ICC Pretoria (Collaboration)
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://www.earthobservations.org/afrigeo.php
Thank you
Questions?