

GGOS Africa — Towards a Coordinated and Unified Africa in Global Geodesy



GGOS-Africa
Global Geodetic Observing
System – Africa

GGOS Africa 2026
05 – 07 October 2026
GGOS Africa Secretariat
Hubert Mathebula

M Making **<** sure **>** it's possible



**science, technology
& innovation**

Department:
Science, Technology and Innovation
REPUBLIC OF SOUTH AFRICA



GGOS Africa Foundations



Vision & Purpose

Vision: A coordinated, sustainable and internationally aligned African space geodetic ecosystem, supporting:-

- African development priorities
- Regional and Global Geodesy Supply Chains

Key Objectives

- Coordinate African participation in GGOS
- Improve geodetic observation quality
- Connect Africa to IAG services
- Strengthen capacity and infrastructure
- Support global reference frames



Why GGOS Africa

Africa's Own Need for Geodetic Data

Limited Infrastructure – Only HartRAO (SA)

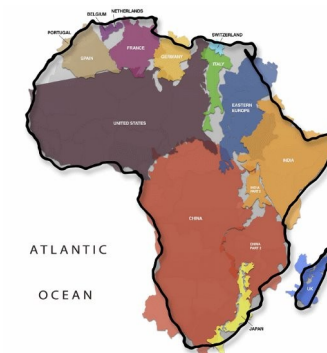
Fragmented Coordination – Legacy Reference Frame

Skills Shortage & Data Access Restrictions

Digital
economy
development

Climate
adaptation,
environmental
monitoring,
disaster
response

Navigation,
surveying,
and mapping



Land
administration,
Navigation,
surveying, and
mapping

Infrastructure
planning

GGOS Africa Core Functions

Continental Coordination

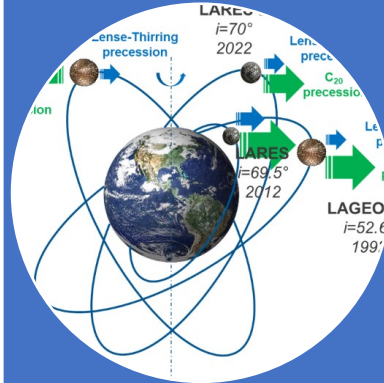


Interface with GGOS
and IAG

Coordinate African
space geodesy
activities

Facilitate international
collaboration

Surveys & Simulations



Infrastructure
mapping

Capacity assessments
Geospatial modelling
Strategic planning

Capacity Development



Training

Mentoring

MSc/PhD pipeline
Technical guidance

Data Node Network



Distributed analysis
centres

Use of open datasets
Integration with
existing HPC resources

Inter-Domain Coordination and Global Participation

Terms of Reference

- **Article 1:** Deals with Name, Legal Status, and Secretariat.
- **Article 2:** Objectives (*Summarised in slide 2*)
- **Article 3: Membership**
 - Open to all AU Member states – Through a National GGOS Focal Point (NGFP)
 - NGFPs submit an application to the Secretariat; approval by the SC
 - Professionals can affiliate as individual members – no voting rights.
 - Continental and International bodies may be granted observer status.
- **Article 4: Governance Structure**
 - **Steering Committee** – up to 14 voting members (Chair & Vice Chair + 2 members from each of the 5 Regions + 2 at-large members). Responsible for strategic oversight and direction.
 - **Secretariat**- administrative, non-voting
 - **Extended Steering Committee** – SC + NGFPs, it is the supreme voting body of GGOS Africa
 - **Annual GGOS Africa Meeting** – open to all members, non-voting business meeting
- **Article 5: Nominations, Elections, and Terms of Office**
 - **Nominations** – shall open in November and be filled at the ESC in March
 - **Elections** – SC members are elected at the Extended SC by Simple majority
 - **Term of Office** – 2-year term renewable for 1 additional 2-year term

Terms of Reference

- **Resignations** – upon a member's resignation, the position remains vacant until the next ESC
 - If Chair resigns, the Vice-Chair takes over, and an interim Vice is elected
 - When both Chair and Vice resign, interim Chair and Vice are elected. Interim positions serve until the next ESC
- **Inactivity and removal** – missing 2 meetings without a submitted excuse or 4 meetings with or without excuse, conduct contrary to GGOS Africa's interests may warrant removal
- **Article 6: Decision Making and Voting** – decisions by consensus; where voting is required, a simple majority is used.
- **Article 7: Meetings** – SC meets quarterly, ESC meets annually, GGOS Africa meeting annually
- **Article 8: Founding Phase Arrangements** – SA Chairs, Kenya Vice Chair, SA hosts secretariat, founding members + interim SC members
- **Article 9: Funding** – not a funding agency, operational costs supported in-kind, may secure project-based funding, e.g. UK STFC-funded foundational assessment.
- **Article 10: Amendments and Review** – reviewed at the end of the founding phase, adopted by ESC
- **Article 11: Adoption and Entry into Force**



GGOS-Africa
Global Geodetic Observing
System – Africa

Call to Celebrate



GGOS-Africa
Global Geodetic Observing
System – Africa

GGOS Africa – Now an Official GGOS Affiliate



Next Steps

- **GGOS Africa now officially a GGOS affiliate:** *Ratify and adopt terms of reference, officially launch GGOS Africa, establish NGFPs;*
- **The state of Geodesy in Africa:** *Next priorities after completing the Infrastructure Survey;*
- **Strategic plans for the future:** *CORS networks, reference frames and vertical datums, new and upgraded space geodetic sites (VLBI, SLR and DORIS);*
- **Capacity development:** *training programmes, the role of Universities and Analysis Centres, etc.*
- **Fostering regional and international partnerships:** *Alignment with UN-GGIM: Africa, AFREF, UN-GGCE, and national authorities; learn from existing GGOS Affiliates; and build links with astronomy, space weather, and funding partners.*

*Dankie
Enkosi
Ha khensa
Re a leboga
Ro livhuwa
Siyabonga
Siyathokoza
Thank you*

M Making < sure it's
possible



science, technology
& innovation

Department:
Science, Technology and Innovation
REPUBLIC OF SOUTH AFRICA

