

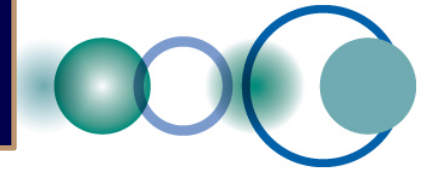
**20 & 21 October 2014  
Athens, Greece**

**2nd South-Eastern Europe GEO Workshop  
on Integrating Earth Observation Data  
and Services for monitoring the  
Environment, protecting the citizens and  
stimulating the regional economic growth**

**The Group on Earth Observations –  
GEO in the next decade:  
an increased focus on the regional  
dimension**

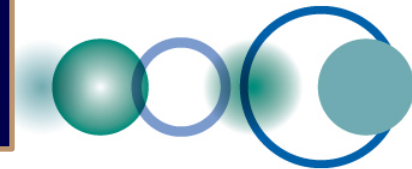
**Dr. Giovanni Rum  
GEO Secretariat**



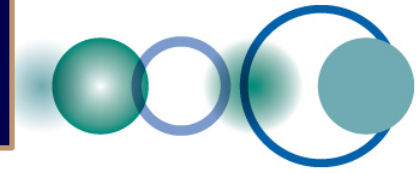


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- GEO today
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## GEO Today



# GEO Vision

To realize a future wherein decisions and actions, for the benefit of humankind, are informed by coordinated, comprehensive and sustained Earth observations and information.

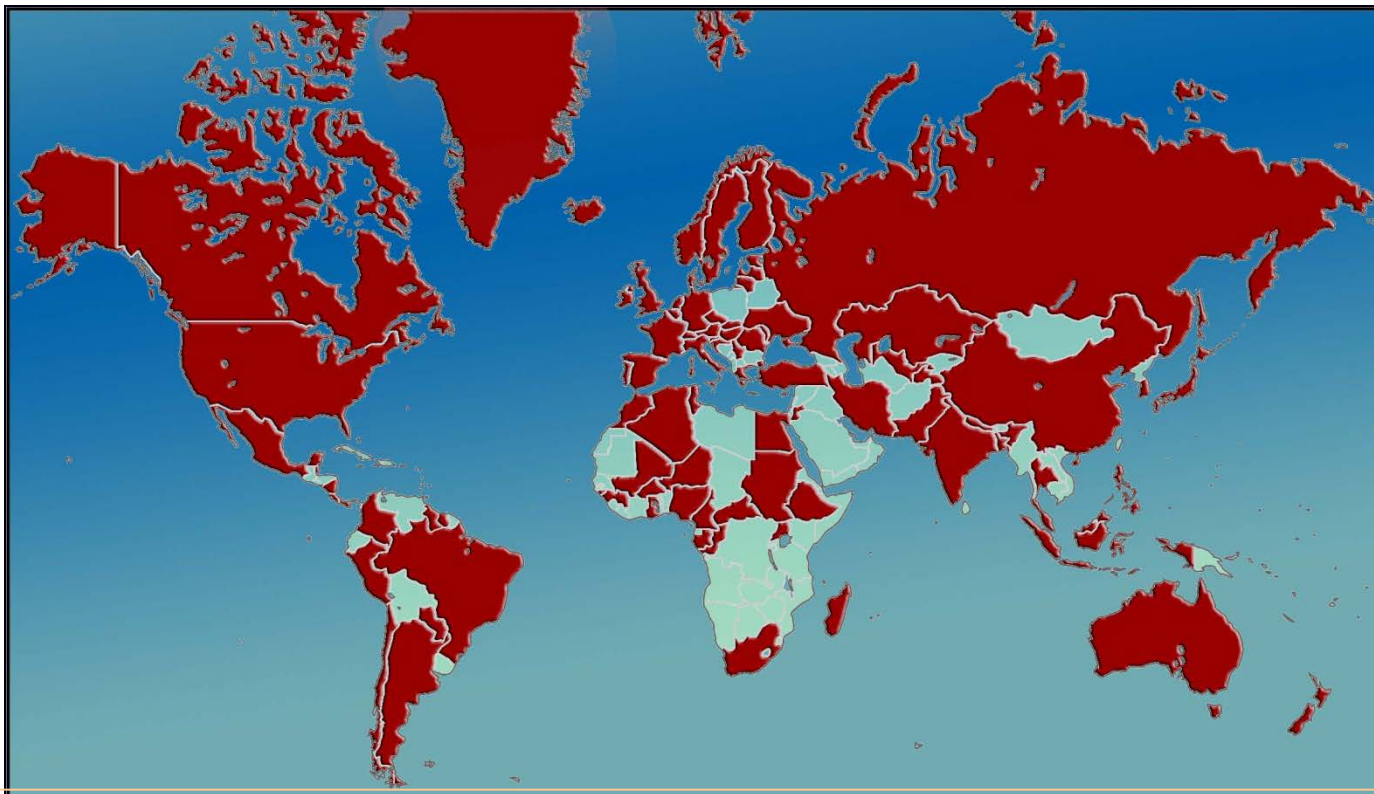


Created in 2005, to develop a Global Earth Observation  
System of Systems (GEOSS) to enhance decision making  
in nine Societal Benefit Areas (SBAs)

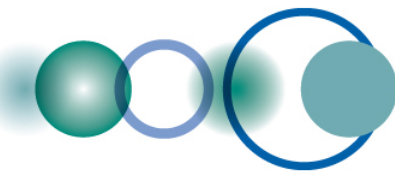
**GEO today:**

**94 Members**

**77 Participating  
Organizations**







## 77 Participating Organizations

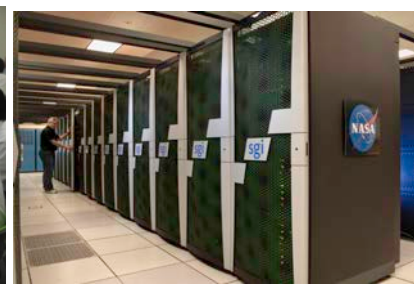


## A broad Commercial Sector spans the entire information value chain

### Data providers



### Value-Added providers



### Downstream users



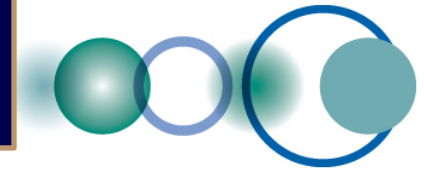




# A Global, Coordinated, Comprehensive and Sustained System of Observing Systems







# GEO Objectives

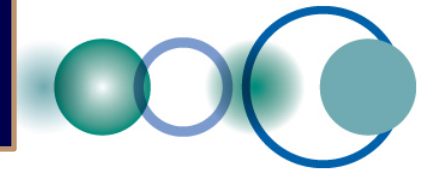
- Improve and Coordinate Observation Systems
- Advance Broad Open Data Policies/Practices
- Provide Access to Data and Information
- Foster Increased Use of EO Data and Information
- Build Capacity



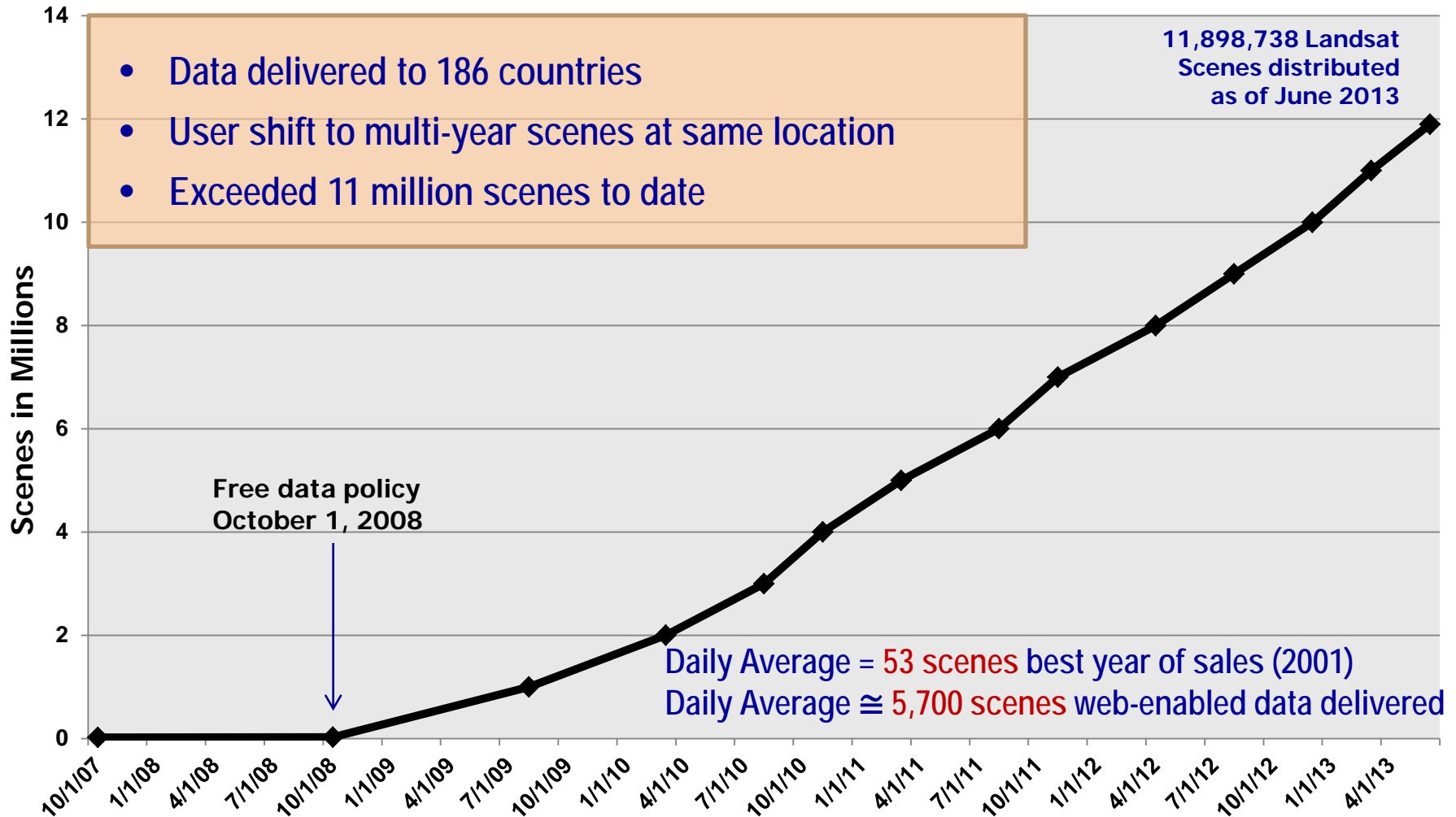
## **GEOSS Implementation Requires: *Data Sharing Principles***

- Full and Open Exchange of Data
- Data and Products at Minimum Time Delay and at Minimum Cost
- Free of Charge or Cost of Reproduction





# Increasing Demand for Free Landsat Data





# GEOSS Common Infrastructure

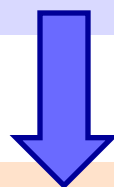






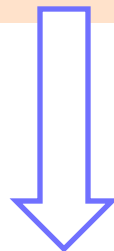
# Current Assets

More than **35** brokered data providers –  
capacities, systems, Communities



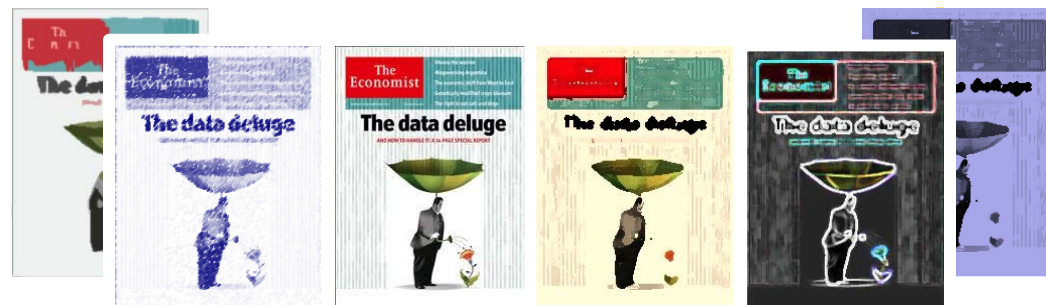
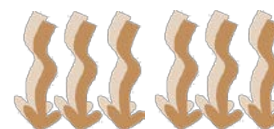
*Publish*

About **14 Million** (**2 Million** GEOSS Data  
Core) potentially Discoverable and  
Accessible resources (mix of data  
collections, datasets and individual images)



*Contain [source: data providers]*

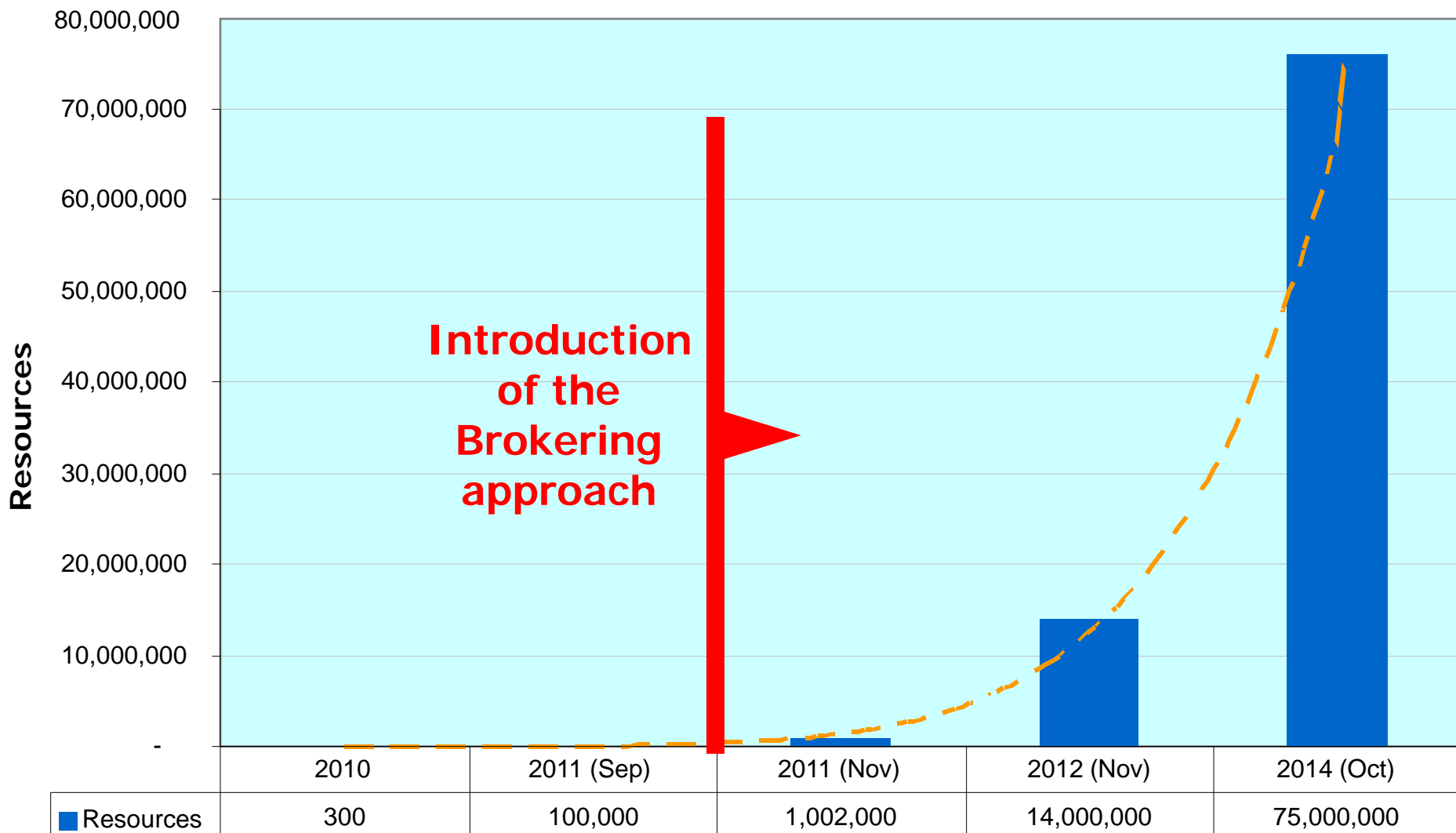
More than **75 Million** (more than **50  
Million** GEOSS Data Core) potentially  
Discoverable and Accessible resources  
(e.g. satellite scene, raingauge record)

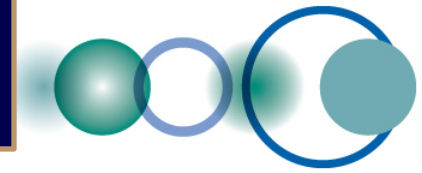


**Resources**



## GEOSS Resources

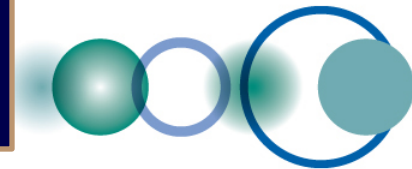




# Examples of how GEO addresses SBAs needs

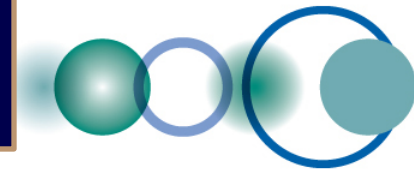
- Near real time warning and response
- Ecosystems classification and mapping
- Advanced land cover products
- Global and local urban footprint
- Tools for health decision-making
- Actionable water information
- Crop information for decision-making (GEOGLAM)

Reference can be made to the GEO WorkPlan, The latest WorkPlan Progress Report and to the Progress report presented at the Geneva Summit in January 2014.



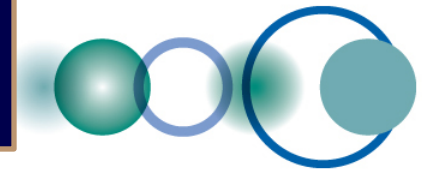
# The GEO Strategic Plan 2016-2025: Implementing GEOSS





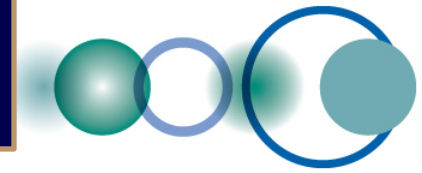
## GEO to 2025 - Context

- In response to Ministers' request at the Geneva Summit in 2014, the GEOSS Implementation Plan Working Group (IPWG) has been mandated to draft Implementation Plan for the next GEO decade.
- The IPWG is composed of 25 members, nominated by the five GEO caucuses. There are four co-Chairs, one of which represents a developing country.
- The IPWG has opted to name the document a *Strategic Plan*, as it went well beyond the implementation of GEOSS and spoke to the function/actions of GEO.



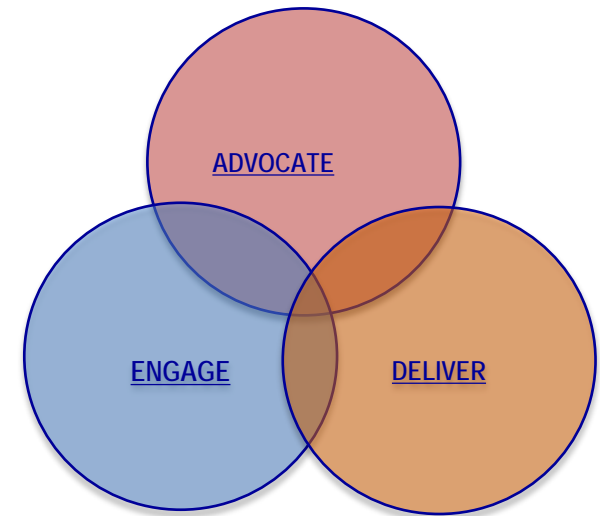
## Overview of the *Strategic Plan*

- The draft outline contains early considerations on the next ten years of GEO action which are the results of the IPWG work to date. These are presented by the IPWG to GEO-XI Plenary for discussion and further guidance.
- The IPWG, in its work, has respected foundational pieces, including the “the 2014 GEO Ministerial Declaration” from the Geneva Summit; and the “Vision for GEO 2025”, adopted by the GEO-X Plenary.



# Strategic objectives and areas of action

- To successfully fulfill its Purpose, during 2016-2025, GEO will actively ***advocate*** for the value of Earth observations as the foundation of environmental information, ***engage*** with stakeholder communities to address every-day societal challenges, and ***deliver*** critical data, information and knowledge to inform decision-making. Collectively, these three areas of action – Advocate, Engage, Deliver – constitute the scope of GEO's activity.
- One strategic objective for each area is proposed
- Specific targets and deliverables in 2016-2025 for each of the three Areas of Action, in line with the three Strategic Objectives

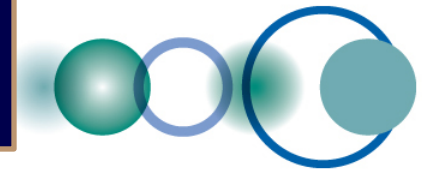




# *GEO Strategic Plan: Outline*

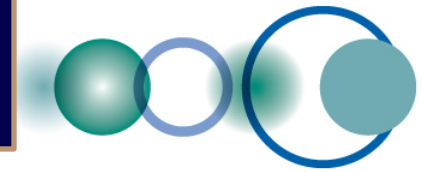
- 1. Introduction:** *This section provides information on what we have learned over the past 10 years and cites the guiding principles (what remains, what should be improved, what is new). The introduction bridges the gap between then and now. It motivates the new plan.*
- 2. Purpose, Scope and Strategic Objectives:** *highlights that the Scope of GEO's activity goes beyond facilitating GEOSS, introducing the concept of the three Action Areas: Advocate. Engage. Deliver. Also, high-level political messages in form of Strategic Objectives are presented.*
- 3. Areas of Action / Core Functions:** *defines the Core Functions of GEO in the context of the three Action Areas.*
- 4. Targets and Deliverables for 2016-2025:** *This section, to be completed over the coming year, outlines the specific targets in 2016-2025 for each of the three Areas of Action, in line with the three Strategic Objectives described in section 2 and referred to the respective Core functions.*





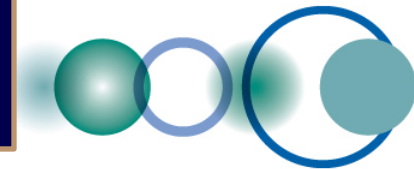
## *GEO Strategic Plan: Outline (cont'd)*

- 5. Management:** *This section defines how the implementation of GEO activities will be managed. It differentiates the six different ways by which GEO implements its functions and distinguishes how they are managed.*
- 6. Governance:** *Governance is defined as the decision-making process(es) within GEO, and refers to the organizational bodies mentioned above. The governance “structure” interfaces with the management of implementation described in section 6 above.*
- 7. Resources through 2025:** *At this time IPWG proposes the mechanism of Programme Proposals for the GEO Flagships as one element of a strengthened resourcing framework for GEO activities. For strengthening the resourcing framework for the GEO Trust Fund, IPWG requests Plenary guidance, whether an indicative scale of contributions could be considered.*
- 8. Getting into Action - Timetable of Implementation**



# What is new in the IPWG proposal

- A GEO Strategic Plan, not only a GEOSS Implementation Plan
- Areas of Action
  - Explicit introduction of the “knowledge” as one key deliverable
  - Specific recognition of GEO Global/Regional initiatives, identified as “GEO Flagships”, Explicit reference to GEOSS Data Management principles
  - Revisit SBAs definition, from the user angle
- Management:
  - A new Management Framework, seeking to strike a balance between flexibility and structure, based on six different mechanisms to operate, each clearly different in terms of the management and resourcing approach taken: decisions of GEO, Community Activities, GEO initiatives, GEO Flagships, GEO Cross-cutting activities, and GEO Secretariat activities.
  - Delegated authority from Plenary to subsidiary bodies to facilitate decision-making.
- Governance and Resourcing:
  - IPWG will propose options to ensure efficient and timely GEO decision making. A number of topics are identified for further exploration.
  - IPWG will propose solution on how to put GEO on a sustainable footing, in particular on how to secure specific contributions from Members and POs at the time an activity is initiated and how to establish a robust budget connected to agreed GEO Secretariat activities.



# Strengthening regional coordination: the AfriGEOSS initiative



## AfriGEOSS's Goal

AfriGEOSS is a GEO initiative to enhance Africa's capacity to produce, manage and use Earth observations, while enabling the Region's participation in, and contribution to, GEOSS.

The main goal is to develop a framework for all Earth observation activities in Africa to allow coordination amongst various programmes, projects and activities across the continent, to reduce duplication of efforts and to address gaps in data and capabilities.





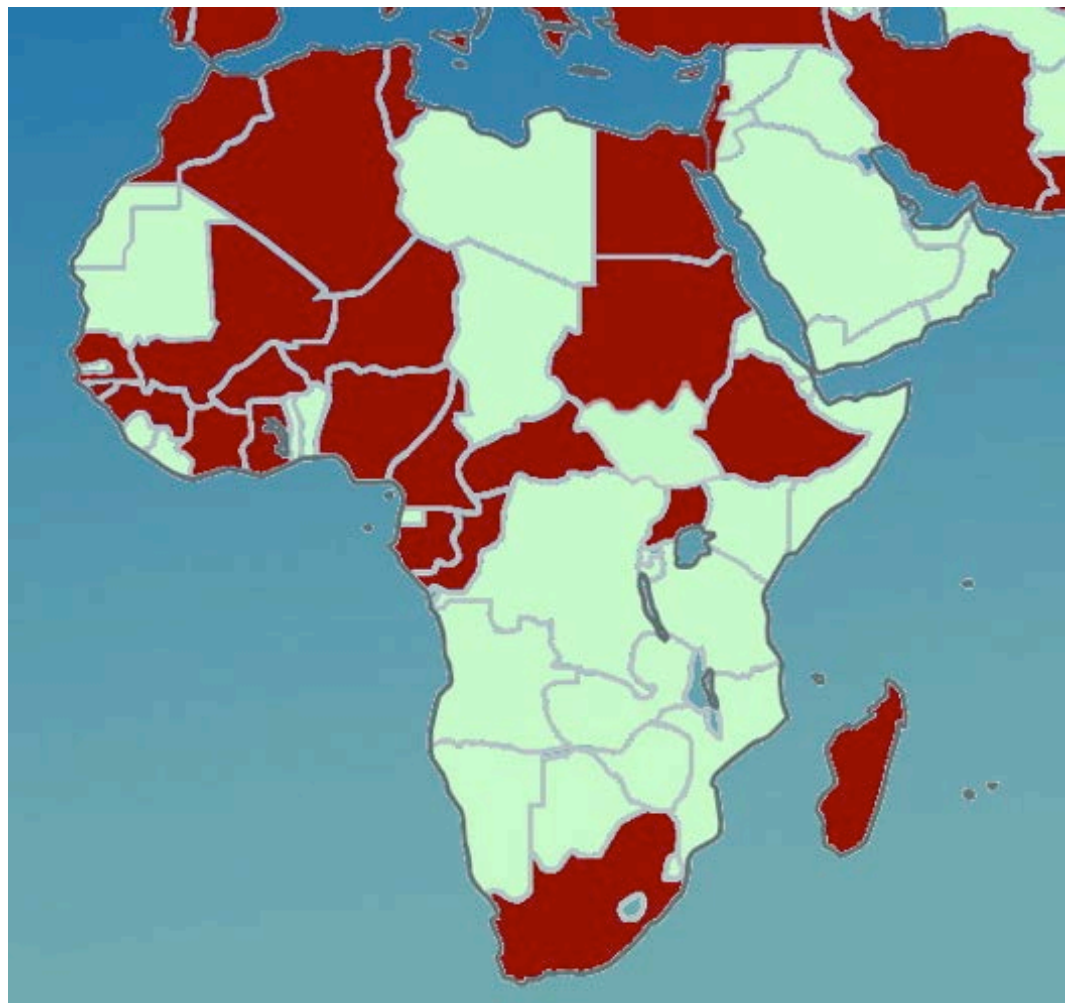
## African Participation in GEO

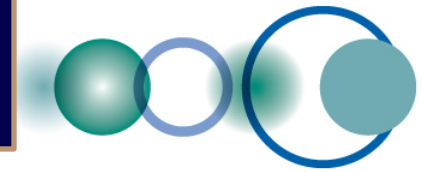
### Member States (23):

Algeria  
Burkina Faso  
Cameroon  
Central African Republic  
Congo, Republic of the  
Cote d'Ivoire (Ivory Coast)  
Egypt  
Ethiopia  
Gabon  
Ghana  
Guinea-Bissau  
Guinea, Republic of  
Madagascar  
Mali  
Mauritius  
Morocco  
Niger  
Nigeria  
Senegal  
South Africa  
Sudan  
Tunisia  
Uganda

### Participating Organizations (5):

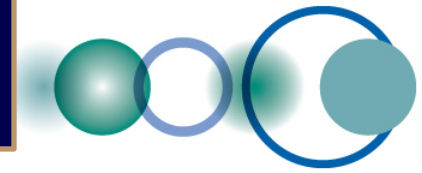
AARSE  
ACMAD  
EIS-Africa  
RCMRD  
UNECA





## Why a dedicated regional framework?

- Coordinate and bring together relevant stakeholders, institutions and agencies across Africa that are involved in GEO and other Earth observation activities;
- Provide a platform for countries to participate in GEO and to contribute to GEOSS;
- Assist in knowledge sharing and global collaboration;
- Identify challenges, gaps and opportunities for African contributions to GEO and GEOSS;
- Leverage existing capacities and planned assets and resources;
- Influence upcoming decisions
- Develop an appropriate strategy and participatory model for achieving the above goals; and
- Develop a strategy of communicating Earth observation data throughout Africa.



## Proposed coordination framework

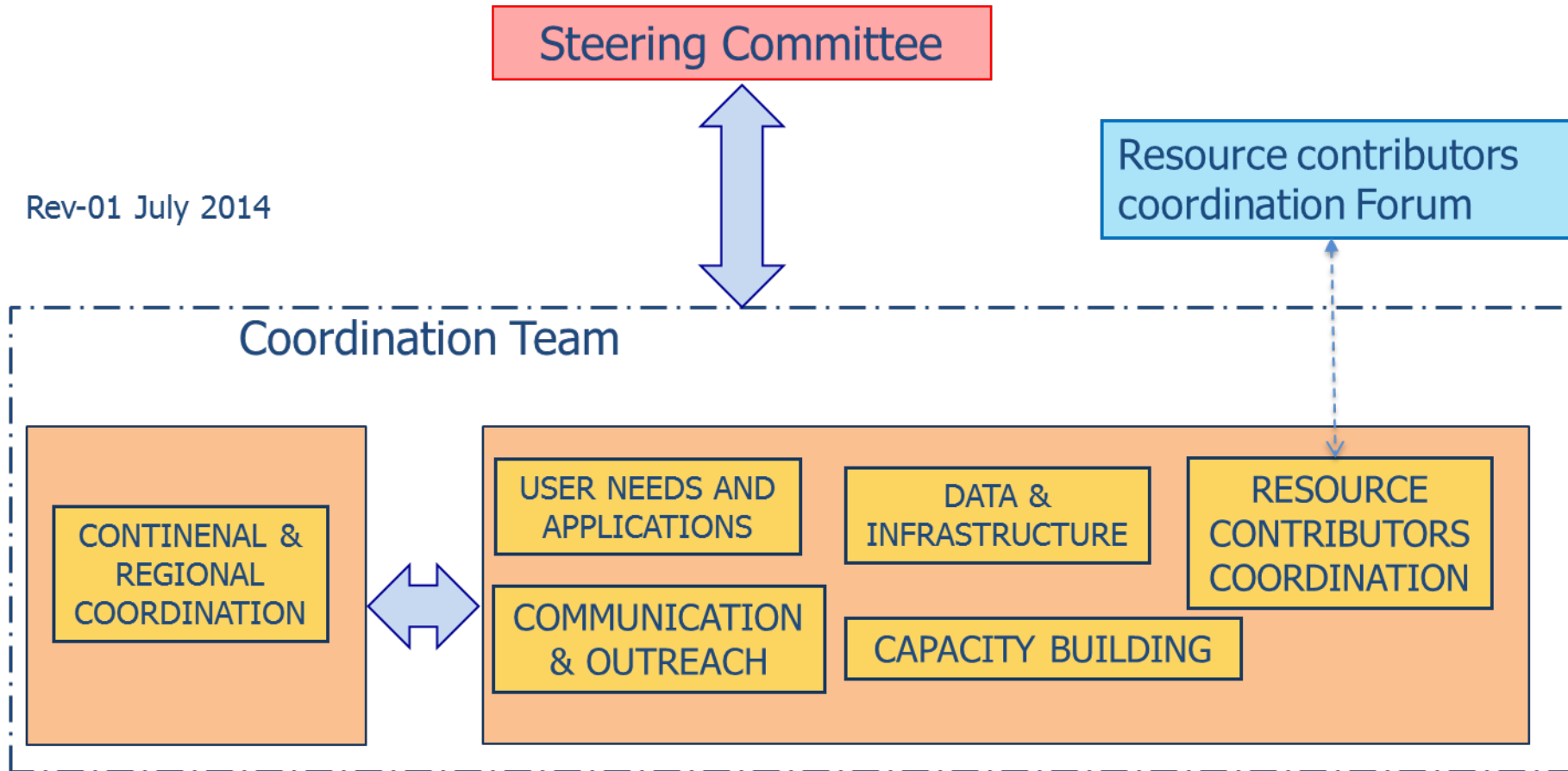
The Proposed framework has three main components :

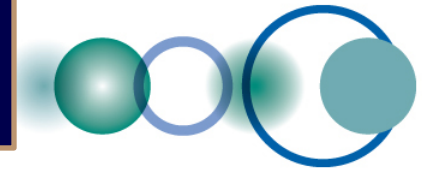
- A network of National Coordinators (NCs), appointed by the GEO Principals where the country is a GEO Member, or through an exchange of letters between the GEO Secretariat and the interested institution;
- Regional Coordinators (RCs), building on existing partnerships such as Regional Economic Communities (RECs) and other regional representative structures; and
- Overall (Continental) Coordination mechanism, constituted by the AfriGEOSS Management in this initial phase of AfriGEOSS Implementation. In the medium term, this is envisaged to be accomplished through continental institutions, such as the African Union Commission, or UNECA



# Proposed overall coordination arrangement

Rev-01 July 2014





# AfriGEOSS Implementation

Since mid-2013 an AfriGEOSS Working Group, involving African GEO Members and POs is working on two key topics:

- define the main AfriGEOSS features and how to put them in place;
- provide the initial reference for coordination and test practical ways on how the actual framework, once in place, could work.

AfriGEOSS has started to receive high level political endorsement and recognition.

An AfriGEOSS Implementation Plan has been prepared by the WG and submitted to GEO-XI Plenary for approval. (Document n. 13 for GEO-XI)





## GEO Members

### Balkan area

- Bulgaria
- Croatia
- Greece
- Hungary
- Romania
- Serbia
- Slovenia

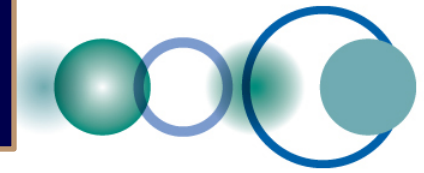


### Middle East

- Cyprus
- Israel
- Malta

### Northern Africa

- Algeria
- Egypt
- Morocco
- Tunisia



# Summary and conclusions

- National, Regional and International collaboration is essential
- Broad open data policies/practices essential for publically funded collections & must be strengthened
- Economic value in downstream elements – value-added products and services
- Strengthen and broaden stakeholder engagement, including the private sector
- Strengthen policy linkages/mandates

## References



Document	
GEO Strategic Plan 2016-2025: Implementing GEOSS	<a href="ftp://ftp.earthobservations.org/GEO-XI/GEO-XI_06_GEO%20Strategic%20Plan%202016-2025_Implementing%20GEOSS.pdf">ftp://ftp.earthobservations.org/GEO-XI/GEO-XI_06_GEO%20Strategic%20Plan%202016-2025_Implementing%20GEOSS.pdf</a>
AfriGEOSS Implementation Plan	<a href="ftp://ftp.earthobservations.org/GEO-XI/GEO-XI_13_AfriGEOSS%20Impl_Plan_Draft.pdf">ftp://ftp.earthobservations.org/GEO-XI/GEO-XI_13_AfriGEOSS%20Impl_Plan_Draft.pdf</a>
GEO Work Plan 2012-2015	<a href="ftp://ftp.earthobservations.org/GEO-XI/GEO-XI_12_GEO%202012-2015%20Work%20Plan%20Update.pdf">ftp://ftp.earthobservations.org/GEO-XI/GEO-XI_12_GEO%202012-2015%20Work%20Plan%20Update.pdf</a>
Progress Assessment report to GEO-XI	<a href="ftp://ftp.earthobservations.org/GEO-XI/GEO-XI_09_Assessment%20of%20Progress%20-%20Targets%20and%20Tasks.pdf">ftp://ftp.earthobservations.org/GEO-XI/GEO-XI_09_Assessment%20of%20Progress%20-%20Targets%20and%20Tasks.pdf</a>
Geneva Summit Progress Report	<a href="http://www.earthobservations.org/documents/ministerial/geneva/MS3_GEO%20Report_on_Progress_2011_2013.pdf">http://www.earthobservations.org/documents/ministerial/geneva/MS3_GEO%20Report_on_Progress_2011_2013.pdf</a>