



**UN-GGIM: AFRICA**

UNITED NATIONS INITIATIVE ON  
GLOBAL GEOSPATIAL  
INFORMATION MANAGEMENT

**Global Geospatial  
Perspectives: The Role of  
UN-GGIM in Advancing  
Geospatial Information**

**By**

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**Director General, Ethiopian Mapping Agency**

**&**

**Chairperson**

**UN-GGIM: Africa Executive Bureau**

**24 November 2017**

**Addis Ababa**



# The United Nations

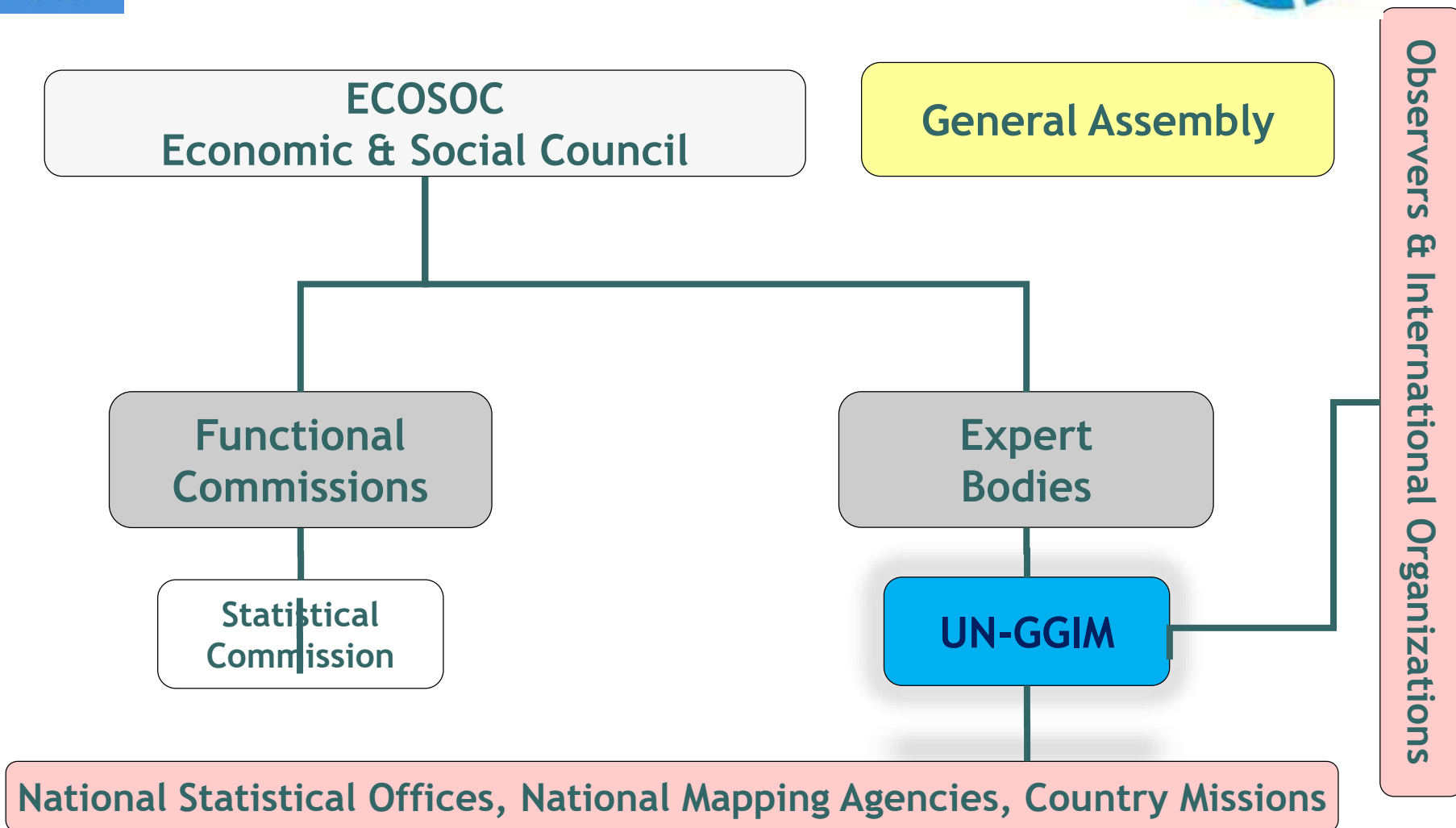


## Six principal organs:

1. General Assembly
2. Security Council
3. Economic and Social Council (ECOSOC)
  - Principal organ to coordinate economic, social and related work of the UN
  - 54 Member States
  - The Committee of Experts on GGIM reports to the ECOSOC
4. Secretariat
  - Carries out the day to day work of the UN
5. International Court of Justice
6. Trusteeship Council
  - Suspended operation on 1<sup>st</sup> November 1994



# UN-GGIM: An Inter-Governmental Body





# OVERVIEW OF UN-GGIM

## Formal inter-governmental UN Committee of Experts to:

- Discuss, enhance and coordinate GGIM activities by involving Member States at the highest level.
- Reports directly to ECOSOC
- Make joint decisions and set directions on the use of geospatial information
- Work with Governments to improve policy, institutional arrangements, and legal frameworks
- Address global issues and contribute collective knowledge as a community with shared interests and concerns
- Develop effective strategies to build geospatial capacity in developing countries





# UN-GGIM: Vision

To make accurate, reliable and authoritative geospatial information readily available to support national, regional and global development



# The UN-GGIM Bureau



**Co-Chair**  
Li Pengde  
NASG- China



**Co-Chair**  
Timothy Trainor  
United States of America



**Co-Chair**  
Ms. Dorine Burmanje  
Chairman Executive Board  
Cadastre and Land Registry  
Agency and Mapping  
Agency, Netherlands



**Rapporteur**  
Mr. Fernand Guy Isseri  
National Mapping Institute,  
Cameroon

The UN Committee of Experts elects three Co-Chairs and a Rapporteur at the commencement of each session, from among its Member State delegations.

## **Responsibilities:**

1. Directing and controlling discussions at all plenary meetings and session of the Committee
2. Directing and monitoring the work of the Committee during intercessional periods



# Committee of Experts of UN-GGIM

Regional  
Committe  
es

UN-GGIM-  
Asia-Pacifi  
(2012)

UN-GGIM:  
Americas  
(2013)

UN-GGIM:  
Europe  
(2014)

UN-GGIM:  
Arab States  
(2014)

UN-GGIM:  
Africa  
(2015)

Bureau

**Japan (Chair)**  
China  
Rep. of Korea

**Mexico (Chair)**  
Chile  
Mexico

**Sweden (Chair)**  
Netherlands  
Spain

**Saudi Arabia (Chair)**  
Algeria  
Jordan

**Ethiopia (Chair)**  
Burkina Faso  
South Africa  
Morocco - Cameroon

**WG 1**  
Geodetic Reference  
Frame for SD

**WG1**  
Integration of Statistical  
and Geospatial  
Information

**WG 1**  
Core Data

**WG1**  
Institutional  
Arrangements, Legal and  
Policy Issues; Awareness  
and Capacity Building

**WG 1**  
African Geodetic  
Reference Frame

**WG 2**  
Data Sharing &  
Integration for Disaster  
Management

**WG 2**  
Access & Use of GI in  
Disaster Risk Reduction  
and Climate Change

**WG 2**  
Data Integration

**WG 2**  
Fundamental Data and  
Geo-Standards

**WG 2**  
Fundamental Datasets

**WG 3**  
Place-Based  
Information for  
Economic Growth

**WG 3**  
Promotion and  
Assessment of SDI

**WG 3**  
Geodetic Reference  
Frame

**WG 3**  
Institutional  
Arrangements and  
Legal Frameworks

**WG 4**  
Standards and Technical  
Specifications

**WG 4**  
Integration of Geospatial  
& Statistical Information

**WG 4**  
Capacity and  
Capability  
Development

**WG 5**  
Regional Coordination  
and Cooperation

**WG 5**  
Integration of  
Geospatial &  
Statistical Information  
for Sectoral  
Applications

Working  
Groups



# Collaboration & Partnerships







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# UN-GGIM: Africa

**A Framework for Action**





UN-GGIM: AFRICA  
UNITED NATIONS GEOGRAPHIC INFORMATION INFRASTRUCTURE AND SERVICES DIVISION

# UN-GGIM: Africa – A Framework for Action

## African Holistic Geospatial Information Vision

- Coordinated approach for cooperative management of geospatial information that adopts common regional standards, frameworks and tools
- Management of global geospatial information to address key global challenges including Sustainable development, climate change, disaster management, peace and security, and environmental stresses
- Intergovernmental Process where the Member States play the key role





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# Background

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- UN-GGIM: Africa was set up to address the issues of developing the capacities of African Nations in the generation and dissemination of authoritative, accurate and maintained geospatial information in the continent.



# Objectives

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- The main objective of UN-GGIM: Africa is to leverage the enabling capabilities of geospatial information technology to meet the African development agenda and in support of the emerging global challenges. This will be mainly achieved through:
  - Promoting and supporting technical activities in the development of standards, interoperability and streamlined electronic services delivery in such a way that they anticipate the future potential use of geospatial information resources on the continent;
  - Strengthening and aligning the specific needs and interests of Africa with international mechanisms;
  - Encouraging and facilitating efforts to integrate statistics into geospatial information to attain viable and meaningful outcomes, analysis and visualization of data in supporting and tracking the progress made towards achieving the 2030 Agenda and the AU Agenda 2063.



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# Key Pillars Highlights

- ▣ ARSDI: African Regional Spatial Data Infrastructure: Frameworks and Policies
- ▣ FDS: Fundamental Geospatial Datasets
- ▣ AFREF: African Geodetic Reference Frame
- ▣ SALB: Second Administrative Level Boundaries
- ▣ GeoNyms: Geographic Names
- ▣ Integration of Geospatial Information and Statistics:
- ▣ The 2030 Agenda for Sustainable Development and the AU Agenda 2063



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# Governance & Structure

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## ▣ Executive Bureau

- **Chair: Ethiopia**
  - **1st Vice-Chair: Burkina Faso**
  - **2nd Vice-Chair: South Africa**
  - **1st Rapporteur: Morocco**
  - **2nd Rapporteur: Cameroon**
  - **Secretariat: Economic Commission for Africa**
-



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# Governance & Administrative Arrangement

<b>Working Group</b>	<b>Chair</b>	<b>Members</b>	<b>Non Voting Members</b>
<b>WG1: African Geodetic Reference Frame</b>	<b>Kenya</b>	<b>Nigeria Morocco Botswana Gabon</b>	<b>RECTAS RCMRD UNECA</b>
<b>WG2: Fundamental Geospatial datasets and Standards</b>	<b>South Africa</b>	<b>Cameroon Burundi Burkina Faso North Africa [TBD]</b>	<b>Niger UNECA</b>
<b>WG3: Institutional arrangements and Legal frameworks</b>	<b>Nigeria</b>	<b>Algeria [TBC] Madagascar Ethiopia Central Africa [TBD]</b>	<b>UNECA</b>
<b>WG4: Capacity and capability development</b>	<b>Morocco</b>	<b>Kenya Zimbabwe Côte d'Ivoire Central Africa [TBD]</b>	<b>South Africa RECTAS RCMRD AARSE UNECA</b>
<b>WG5: Integration of Geospatial and Statistical Information for Sectoral Applications</b>	<b>Namibia</b>	<b>South Sudan Liberia Cameroon Morocco</b>	<b>Zambia Gabon UNECA</b>



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# Activities & Achievements

## 1. UN-GGIM: Africa Action Plan

The Continental action plan on UN-GGIM: Africa, “**African Action Plan on Geospatial Information for Sustainable Development**” (GI4SD), was developed and aligned with global agendas and programmes (UN Agenda 2030 and AUC 2063 Vision). The Action Plan as formally endorsed by the UN-GGIM: Africa during its 2<sup>nd</sup> Session in Grand-Bassam, Côte d’Ivoire has now been published and distributed to Member States and Development Partners during the 3<sup>rd</sup> Session of UN-GGIM: Africa held 22 -23 November here in Addis Abeba in parallel with the AfricaGis 2017 Conference.





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## Activities....

### 2. Integration of Statistical and Geospatial Information

The Regional Committee of United Nations Global Geospatial Information Management for Africa has started the development of a global strategic framework for the integration of statistical and geospatial information. The strategy outlines some of the policy principles on how to mainstream geospatial technology into the work of national statistics offices.



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## Activities....

### 3. Identification of Geospatial Datasets for SDG Indicators

In supporting the implementation and reporting on the 2030 Agenda for Sustainable Development, UN-GGIM: Africa has developed a matrix identifying the geospatial datasets that are labelled based on their criticality for the monitoring and implementation of the goals and targets for each of the sustainable development goal indicators. This work is on-going and will be aligned with the activities of the Inter-agency and Expert Group on Sustainable Development Goal Indicators Working Group on Geospatial Information.



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# Activities....

## 4. Capacity Development

- To fully leverage the “enabling” capabilities of geospatial information for sustainable development, capacity building requires immediate attention so as to ensure that **no one is left behind** in this regard.
- However, in Africa, it is recognized that the **geospatial information divide is growing and an urgent intervention is required** to reverse this trend and to enable the continent to reap the benefit of this critical development infrastructure
- UN-GGIM: Africa has made some efforts to garner technical support in this connection from public and private sector development partners on bilateral and/or multilateral basis. However, there is still more to be done and therefore the support of UN-GGIM Secretariat and UNECA remains essential to realize this goal.



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## Activities....

### 5. Participations and Contributions of UN-GGIM: Africa

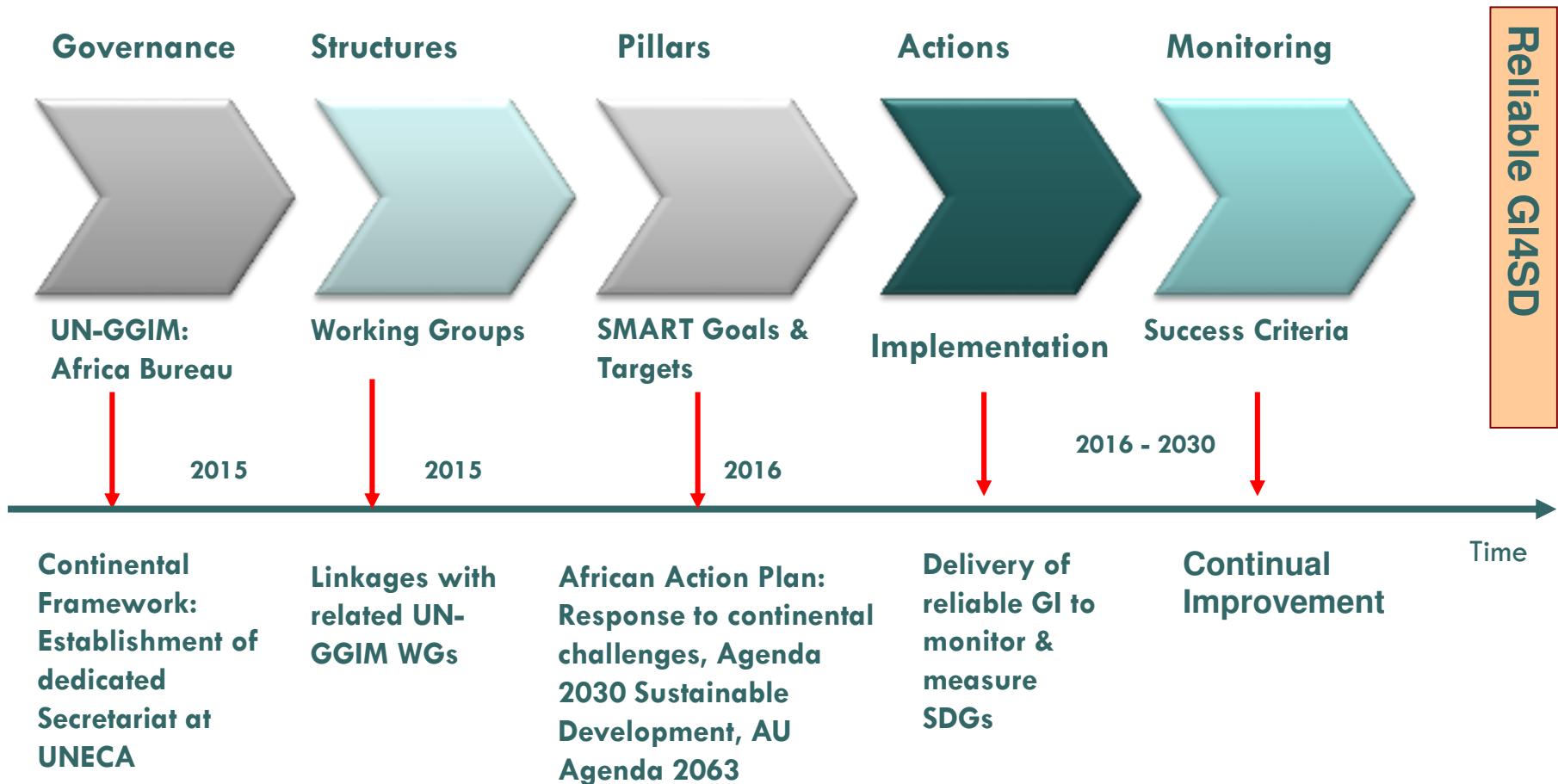
The Regional Committee of UN-GGIM: Africa has participated in several geo-related events, including UN-GGIM Sessions High Level Forums, taking those opportunities to interact with a broad range of decision makers, users and service providers from various countries. Participating in such meetings is important, as the region takes advantage of those events to deliver keynotes and express Africa's vision and strategy for geospatial science and technology development. The various conferences also offered opportunities to keep abreast with the current trends of geospatial services and products.



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# UN-GGIM: Africa : The Journey So far, What Next... Outlooks, Future Plans

## Main Focus: Continual Capacity Development



# ● ● ● Way Forward

- ▣ Policy : Institutional mechanisms aligned with national efforts, while taking into account international perspectives
- ▣ Data democracy : Ubiquitous availability of relevant spatial data/information as common goods. Adhering to agreed standards : metadata, data models, encoding, interoperability
- ▣ People : High Level Education to empower African youth in geospatial science and technology culture at all education levels (schools, universities).



**Strengthening  
governance  
of geospatial  
information**



**Meeting  
urgent  
development  
needs**



**Providing a  
service  
(Spatial  
enablement)**



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## UN-GGIM: Africa : What Next...

### 1. **Overarching Geospatial Information Policy for Africa**

- After more than a decade of work on spatial data infrastructure development in Africa, it still remains an incoherent piece-meal approach characterized by loose networks and informal relationships. Still there is evidence of a complete lack of national geospatial information policy on the continent. In that regard, UN-GGIM: Africa has taken the step to develop an African Geospatial Information Policy as an overarching policy framework for formulating national policies for geospatial information on the continent. The expectation is that the framework will help in harmonizing the efforts and in attracting the funding required to drive the efforts, maintain support and gather momentum in enhancing Member States capabilities to undertake reforms that increasingly ensure operational effectiveness to support timely delivery of geospatial data, products and services for national planning and decision-making.



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# UN-GGIM: Africa : What Next...

## 2. Geospatial Information Standards for Africa

- ❑ African countries and their partners collect and manage large amounts of geospatial data, but these data are often not easily accessible or not well documented and organized in a standardized way. UN-GGIM: Africa has embarked on the preparation of a guideline document on geospatial standards.
- ❑ National mapping agencies will use this guideline document as a reference for strengthening the harmonization of fundamental geospatial datasets in Africa, including the common standards and metadata that would make statistical and geospatial information more useable and more relevant to a wider range of stakeholders.





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# Challenges

- ❑ The establishment of effective national leadership and the institutional arrangements for operationalizing an integrated and coherent approach to UN-GGIM: Africa activities implementation at continental and national level.
- ❑ Member States capabilities to undertake reforms that increasingly ensure operational effectiveness to support timely delivery of geospatial data, products and services for national planning and decision-making.
- ❑ Mobilisation of resources needed for the Executive Bureau and Working Groups to effectively discharge their duties.



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# Conclusion

- The Regional Committee of United Nations Global Geospatial Information Management for Africa has made substantive progress in terms of gaining some momentum and assuring the global community that Africa is serious about contributing.
- The region is at the forefront of the worldwide effort towards the integration of geospatial information and statistics. There is strong recognition and determination for the two disciplines to work together to achieve better results for both, as recognized by the revamped Strategy for Harmonization of Statistics in Africa.



# Thank You!

AGU AGU 2012 apps ArcGIS ArcGIS Online change detection classification climate  
change climate observation Cloud cloud image processing data fusion data  
management defense defense & intelligence E3De earth observation enterprise enterprise  
gis enterprise image analysis enterprise solutions ENVI environmental  
monitoring envi services **GGIM** engine esri Visual Information  
Solutions geoint geospatial geospatial analysis geospatial  
apps geospatial data geospatial defense and intelligence geospatial  
education geospatial imagery geospatial intelligence geospatial software geospatial  
technology **GIS** gis education ILMF image analysis Image delivery Image  
Dissemination image processing imagery integrated data interoperability JPEG  
2000 JPIP land cover classification Landsat Landsat7 landsat 8 landsat data continuity  
mission LDCM **LiDAR** LiDAR data mobile image analysis **NASA** natural  
disaster NGA NOAA NIP OGC **remote sensing** remote sensing data remote sensing  
education SAR satellite term confusion USGS VIIRS VIS Visualize wildfire