4th Plenary of UN-GGIM: Europe

UN-GGIM: Strengthening the Global Data Ecosystem

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REQUIRES COURAGE TO COMMIT
STRENGTH IS IN THE IMPLEMENTATION
Strengthening the Global Data Ecosystem

ECOSOC Resolution 2016/27

• Acknowledged the considerable achievements and progress made by the Committee of Experts in the area of global geospatial information management, its contribution to the strengthening of geospatial information management capacities and utilization in developing countries, and recognized the relevance of geospatial information for the various United Nations policy agendas.

• Stressed the need to strengthen the coordination and coherence of global geospatial information management, in capacity-building, norm-setting, data collection, dissemination and sharing, among others, through appropriate coordination mechanisms, including in the broader United Nations system, building on the work of the Committee.

• Item on the Council’s agenda changed from ‘Cartography’ to ‘Geospatial information, and invited the Committee to report on all matters relating to geography, geospatial information and related topics; and to report back to the Council within five years on the implementation of the present resolution.'
Positioning geospatial information to address global challenges

Digital Earth

Global Data Ecosystem

Digital Evolution

Digital Transformation

Digital Divide

Digital Maturity

Implementing Nationally Integrated Information Systems

United Nations Secretariat
Global Geospatial Information Management

ggim.un.org
Global development policy framework

Sendai Framework for Disaster Risk Reduction 2015 - 2030

ISLAND VOICES
GLOBAL CHOICES
UN Conference on Small Island Developing States Apia, Samoa | 2014

Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda)

THE OCEAN CONFERENCE
UNITED NATIONS, NEW YORK, 5-9 JUNE 2017

UNIVERSITY OF THE OCEAN
UNITED NATIONS SUSTAINABLE DEVELOPMENT SUMMIT 2015
25 - 27 SEPTEMBER

POSITIONING GEOSPATIAL INFORMATION TO ADDRESS GLOBAL CHALLENGES

GLOBAL POLICY FRAMEWORK

Sendai Framework for Disaster Risk Reduction 2015 - 2030

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Technology and society are driving digital transformation, but are we yet leveraging this new ‘data ecosystem’ effectively?
Positioning geospatial information to address global challenges.
Do we really understand the scale of the problems, where they are, whom they impact, what are the causes, and how they can be remedied?
Do we have the data for development??
Can we make it ‘production ready’ information for all?
GLOBAL DEVELOPMENT POLICY FRAMEWORK

| The 2030 Agenda for Sustainable Development | Sendai Framework for Disaster Risk Reduction 2015-2030 | SIDS Accelerated Modalities of Action (SAMOA) Pathway | Paris Agreement on Climate Change | HABITAT III Urban Agenda |

How does Digital Transformation enable the ‘data ecosystem’ to achieve Sustainable Development?

How do we bridge the Digital Divide?
2030 Agenda: Goals, targets, indicators

17 SDGs

169 Targets

232 global indicators to follow-up and review progress

Implementation via national planning processes, policies, strategies and frameworks

Measuring and monitoring: Statistics, geospatial information, Earth observations and other Big Data

Positioning geospatial information to address global challenges
Addressing the data needs for the 2030 Agenda

- Need for quality, accessible, timely and reliable disaggregated data
- Need to include all parts of the statistical system and new data sources
- Data on a wide range of topics; unprecedented amount of data

Interoperability and integration of systems is crucial to harnessing the potential of all types of data
Addressing the data needs for the 2030 Agenda

- The scope of the 2030 Agenda requires high-quality and disaggregated data that are timely, open, accessible, understandable and easy to use for a large range of users, including for decision making at all levels.

- There is a need for a reporting system on the SDGs that would have benefit from the sub-national (local) to the national level; and allow for global reporting that builds directly on the data shared by countries.

- Important to create an opportunity for countries to directly contribute to the global reporting. While the challenges are immense, the digital technology that is available today allows the necessary transformation.

- An aspiration is to strengthen countries’ national geospatial and statistical information systems to facilitate and enable a ‘data ecosystem’ that leverages an accessible, integrative and interoperable local to global system-of-systems.
Strengthening the Global Data Ecosystem

UN-GGIM: 2011-2016 - Develop the global understanding of geospatial information

UN-GGIM: 2017-2021 - Coordination, coherence and implementation

• Facilitate the strengthening and normative capacity building of global geospatial information management in support of the implementation of the 2030 Agenda.

• Efforts include promoting the use of geospatial information systems and services for modern mapping; methodological development; national and regional capacity-building; standards-setting; data collection, dissemination and sharing; and better integration of geospatial and statistical information systems for Member States.

• Regional Commissions provide relevant support, upon request and as appropriate, to the work of the regional committees of UN-GGIM, and that the outcomes and benefits of the activities be equally disseminated to all Member States in each region.
Strengthening the Global Data Ecosystem

UN-GGIM: 2017-2021 - Coordination, coherence and implementation

1. Maturity: Moving from “GGIM 1.0 to GGIM 2.0” - determining our value proposition to ECOSOC in the next 2-3 year horizon.

2. Strategy and roadmap on the ECOSOC resolution and how we implement the new and strengthened mandate.

3. A new Strategic Plan for UN-GGIM that considers 2020 and beyond in 5 year time steps.

4. Raising more awareness, including political, of UN-GGIM and connecting the political-technical levels within Member States.

5. Connecting more to the activities of the regional committees, Regional Commissions, and relevant statistical bodies.


7. Seek extra-budgetary and funding options, including ways of implementation.

8. More capacity development for countries in next 5 years - developing guides, standards, methods and norms.
## Strengthening the Global Data Ecosystem

### 2017-2021 Strategic Framework

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<th>CONTEXT</th>
<th>VISION</th>
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<td><strong>MANDATED STRATEGIC OBJECTIVES</strong></td>
<td>Operating within agreed policies and institutional arrangements, and as an interconnected global community of practice, the Committee of Experts will ensure that geospatial information and resources are coordinated, maintained, accessible, and able to be used effectively and efficiently by Member States and society to address key global challenges</td>
<td>Provide leadership in setting the agenda for the development of global geospatial information and to promote its use to address key global challenges</td>
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**UN-GGIM**

United Nations Secretariat
Global Geospatial Information Management

ggim.un.org
## Transforming our World: The 2030 Agenda for Sustainable Development

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<th>GLOBAL POLICY FRAMEWORK</th>
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<td>GEOSPATIAL CHALLENGES &amp; DRIVERS</td>
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<td>Legal &amp; policy</td>
<td>Health &amp; welfare</td>
<td>Poverty reduction</td>
<td>Sustainable cities</td>
<td>Socio-economic metrics</td>
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### REQUIREMENTS

- Reduced duplication of effort in the capture, management, and delivery of fundamental geospatial information
- Authoritative, reliable and maintained geospatial data available nationally, regionally, and globally
- Increased return on investment through better coordination, use and reuse of data, information and systems
- Better evidence-based decision making, supported by good data, science and policy
- More open, accountable, responsive and efficient governments
- Presentation and delivery of timely and ‘fit for purpose’ data in times of need
- Increased collaboration and integration of national data and information systems across all levels of government
- Best practices and use cases for enriching national processes on geospatial information management

### DIRECT NATIONAL BENEFITS & EFFICIENCIES

- **OPERATING PRINCIPLES**
  - Sound Nat. Policies, Legal Frameworks & Institutional Arrangements
  - Provision of Fundamental Authoritative Data and Information
  - Agreed Standards, Methods, Guides and Frameworks
  - Principles on Geospatial Information and Open Data
  - Integration and Interoperability of National Information Systems
  - Information Sharing and Knowledge Transfer
  - Building Local to Global Capacity & Capability

### DELIVERABLES

- Geospatial Information for Sustainable Development: 2030 Agenda, Sendai Framework, etc.
- Integration of Geospatial & Statistical Information: Implement the Global Statistical Geospatial Framework
- Geospatial Information and Services for Disasters: Implement Strategic Framework
- Global Geodetic Reference Frame: Roadmap to Implement
- Determination of global fundamental data themes
- Marine geospatial information
- Land administration and management
- Legal and policy frameworks
- National institutional arrangements
- Implementation and adoption of standards for the global geospatial information community
- National geospatial data and information systems
Strengthening global geospatial information management

Contribution of regional committees, thematic groups and networks

Legal and policy frameworks and issues related to authoritative data

Trends in national institutional arrangements

Adoption of standards and technical specifications

Strengthening collaboration with UNGEGN

United Nations activities in geospatial information management

Secretariat programme management

Frameworks, guides, norms, standards and methodological development

Normative strengthening, capacity building and implementation of GGIM in support of the 2030 Agenda

Global geodetic reference frame

Global fundamental geospatial data themes

Integration of geospatial, statistical and other information

Geospatial information and services for disasters

Land administration and management

Geospatial information for sustainable development

National geospatial data and information systems

Marine geospatial information

UN-GGIM: Strengthening the Global Data Ecosystem

The activities and efforts that contribute to the unique local-to-global value of UN-GGIM for Member States
Strengthening the Global Data Ecosystem

- Strategic Framework is presented as a starting point for discussion towards a strategic plan and road map that will enable the Committee to be better supported by the regional committee architecture and the Regional Commissions.

- Continue to work on global policies for geospatial information management in tandem with producing tangible outputs such as norms, handbooks, methodologies, standards and guidelines.

- Need for closer synergies with the activities of the regional committees and working groups, Regional Commissions, and relevant statistical bodies.

- Substantively improve and strengthen the national geospatial information management capacities of developing countries towards implementing the 2030 Agenda and other global policies.
Strengthening the Global Data Ecosystem

- Effort by UNSD and the World Bank to explore and develop possible mechanisms for geospatial data, infrastructure and policies to be embedded more holistically within concessional financing, technical assistance and knowledge-sharing services and their subsequent implementation in developing countries.

- Recognizes the need for collaboration in developing an overarching geospatial framework that countries could reference when using geospatial information to develop national systems tailored to their own situations.

- The framework would include an action plan and road map on means for implementation, as well as elements such as the economic impact and value of geospatial information systems, investment needs and associated principles, tools, guides and good practices.
Positioning geospatial information to address global challenges

An integrative data ecosystem

SDG metrics for measuring and monitoring progress. Data compiled and disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location, etc.

Official Aggregation and Integration into Indicator Framework by National Statistical Offices. Captures data integrity and validation.

Earth Observations and Monitoring
- Imagery
  - Water/Ocean
  - Land use/cover
  - Observations
  - In situ monitoring
  - Air/Pollution
  - Ecosystems
  - Forest/Agriculture
  - Climate

National Spatial Data Infrastructure
- Geodetic positioning
  - Elevation
  - Topography
- Land use & cover
- Transport/Infrastructure
- Cadastre/Parcels
- Water & Oceans
- Cities & Settlements
- Administrative Bdys.

National Statistics, Accounts, Administrative Registers, Demographics
- Population
- Demographics
- Poverty
- Trade/Business
- Environment
- Labour/Economics
- Agriculture
- Disability/Gender
- Civil Registration & Vital Stats.

Other Sources of Data, incl. Big Data
- Mobile phone
- Social media
- Sensors
- Automated devices
- Satellite imagery
- VGI
- Crowd sourcing
- ??

Fundamental baseline data and new data sources

Local to national social, economic and environmental conditions and circumstances

National Sustainable Development Indicators

Data Inputs

National Information Systems
The fact is that no species has ever had such wholesale control over everything on earth, living or dead, as we now have. That lays upon us, whether we like it or not, an awesome responsibility. In our hands now lies not only our own future, but that of all other living creatures with whom we share the earth.

David Attenborough