Side Event: Innovations in Integrating Geospatial and Statistical Information for the SDGs, COVID-19 and National Development

By
Expert Group on the Integration of Statistical and Geospatial Information (EG-ISGI)

0800 – 1000 am New York (EDT/UTC-4)
Wednesday, 18 August 2021

Germany
Ms. Kathrin Gebers
Destatis

Namibia
Mr. Alex Mudabeti
Namibia Statistical Agency
Reviewing the Work of the EG-ISGI
Promoting the Global Survey on Readiness for the GSGF

- 90 complete replies were submitted from 76 Member States and 2 non-Member State observers
- 59% of Member States submitted a coordinated reply from the NSO and NGIA
- 41% of Member States submitted singular replies representing only one organisation.
Reviewing the Work of the EG-ISGI
Strengthening Regional Coordination – in April 2021

How can we strengthen the bridge between, and within, the Regional and Global Communities for Integrating Statistical and Geospatial Information.... But there are many moving parts... and this is, and will be, an ever-changing landscape with interlinkages and different touch points.
Reviewing the Work of the EG-ISGI
The Structure of the EG-ISGI - Setting up for Success

--> Bringing it all together and consolidating the work of the EG-ISGI

Status of GSGF Translations
- English
- French
- Spanish
- Chinese
- Arabic (in review)
- Russian (tba)

WS on Interoperability
WS on Common Geographies
WS on Geocoding
TT on Privacy and Confidentiality
TT on Capacity Building
National Responses to COVID-19
2020 Round of Census + Other National/Global Priorities

A Single Document that Consolidates Guidance for Member States in Implementing the GSGF
Draft for UN-GGIM, Finalised version for the Statistical Commission
Reviewing the Work of the EG-ISGI

The Structure of the EG-ISGI - Setting up for Success

--> Bringing it all together and consolidating the work of the EG-ISGI

Status of GSGF Translations
- English
- French
- Spanish
- Chinese
- Arabic (in review)
- Russian (tba)

WS on Interoperability
WS on Common Geographies
WS on Geocoding
TT on Privacy and Confidentiality
TT on Capacity Building
National Responses to COVID-19
2020 Round of Census + Other National/Global Priorities
Food Security

Global Picture of GSGF Readiness
Consolidated National Experiences

A Single Document that Consolidates Guidance for Member States in Implementing the GSGF

Draft for UN-GGIM, Finalised version for the Statistical Commission

To be Elaborated --> Q4 2021

Interlinkages with the IGIF

Background Documents at the 11th Session
Reviewing the Work of the EG-ISGI
Delivering Guidance to Implement the GSGF

Translations of the GSGF
- Chinese, French and Spanish have been finalized
  - Thanks to China (Chinese – Mandarin), Canada and UNECA (French) Mexico, ECLAC and others (Spanish)
- Arabic is being finalised

The Draft GSGF Implementation Guide
- The Draft GSGF Implementation Guide is submitted to UN-GGIM to seek the perspective of the Committee of Experts
- Following the Eleventh Session of UN-GGIM, the documentation will be finalised for endorsement by the Statistical Commission

The Global Survey on Readiness at the Country Level for Implementing the GSGF

National and Regional Experiences of Implementing the GSGF
- Experiences of how the GSGF is implemented by 29 Member States and 2 Regional Commissions, including how it has assisted the response to COVID-19.
Section on Geocoding:

- Details the need for a location description to a position in space.
- Links information associated with a statistical unit (dwelling, business, etc.,) to a set of coordinates within a coordinate system.
- Provides geographic structure enabling geospatial aggregation, analysis, and presentation of statistical data.
- Allows for location-based data analytics and data mining.
- Enshrines the importance of the Global Fundamental Geospatial Data Themes for the availability of data to enable Geocoding.
- Urges the practical implementation of geocoding in the GSGF: “All statistical unit records should include or be linked to a precise geographic reference (an x- and y-coordinate), and if not, the smallest geographic area possible.”

- Future work in this area will elaborate and link the GSGF implementation guidance to the relevant area(s) of the Integrated Geospatial Information Framework – specifically its Strategic Pathway 4: Data.
The Draft GSGF Implementation Guide
Common Geographies

Section on Common Geographies:

• Describes the broad types of Common Geographies:
  • The GSGF states that "a common set of geographies [to] ensure that statistical data is geospatially enabled in a consistent manner and is capable of being integrated at the aggregate level; and also ensures that users can discover, access, integrate, analyse, and visualise statistical information seamlessly into geographies of interest".
  • Enables the production and dissemination of integrated statistics and geospatial information within a country to support informed decision-making.

• Underscores the continuing need for country-specific dissemination geographies and geographic classifications. New or proposed common geographies should be viewed as congruent and adjunct to the existing national administrative and statistical geographic areas.

• Encourages the adoption of common geographies. The following objectives may be attained:
  • Enhanced capacity to produce aggregated data and indicators for domestic purposes.
  • To meet the monitoring and reporting needs of global indicator framework requirements of international and regional initiatives (e.g. the 2020 Round of Population Censuses, 2030 Sustainable Development Goals).
  • To address emerging challenges that become immediate priorities (COVID-19 pandemic) for countries, and regional and international agencies.

• Future work in this area consists of identifying use-cases and the elaboration of the GSGF implementation guidance to the relevant area(s) of the Integrated Geospatial Information Framework – specifically its Strategic Pathway 4: Data.
Section on Privacy and Confidentiality:

- Contextualizes the modern needs of NSOs and NGIAs in fostering interoperability, privacy and confidentiality when advancing their use of geospatially enabled statistical data
- Discusses types of data disclosure:
  - Identity disclosure refers to finding a direct identifier of a statistical unit from the data (for example, name or address);
  - Attribute disclosure refers to revealing an association between a statistical unit and its sensitive features. For example, the user knows someone is living in an area, while the data show that all the inhabitants of this area share a common characteristic, such as income; and,
  - Inferential disclosure refers to inferring some attribute with a high confidence level, where increasing confidence levels is a desirable outcome for statistical data users.
- Summarises the current state of relevant academic literature and highlights good practices in Privacy and Confidentiality

Section on the Terminology of the Integration of Statistical and Geospatial Information

- Proposes an agreed initial set of definitions of key concepts, to help share knowledge of existing terminologies and practices and align the description of concepts in order to reach a common understanding among representatives of statistical and geospatial communities
Members of the EG-ISGI, both Member States and Regional Commissions were invited to submit how the GSGF has been implemented and operationalised along three main areas of interest:

1. The Overall Implementation of the GSGF
2. The Implementation of the Principles of the GSGF
   i. Elaborated by the GSGF’s five principles, one submission per principle.
3. Your National Response to COVID-19
   i. How has the GSGF supported your national response to COVID-19?
   ii. How could the GSGF have supported your national response to COVID-19, if it had been implemented? What were/are the barriers in its implementation?

In sum, 29 Member States: Australia, Botswana, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Egypt, Finland, Germany, Ghana, Honduras, India, Indonesia, Kenya, Kuwait, Malawi, Mexico, Namibia, New Zealand, Panama, Peru, Senegal, Sierra Leone, South Africa and Uruguay provided their national experiences, representing contributions of how the GSGF is implemented within, and by, NSOs, NGIAs either individually or collaboratively.

Further, UN-GGIM Africa and UN-GGIM Americas offered their regional perspectives as case studies.
The Road to the 53rd Statistical Commission
The Next Six Months

Global Survey on Readiness to Implement the GSGF
• https://surveys.enalyzer.com/survey/linkindex?pid=rmad4d28

Finalising the GSGF Implementation Guidance
• Incorporate the Committee’s feedback
• Strengthen the interlinkages between the GSGF and the IGIF
  • The means to implement the GSGF, *is the Integrated Geospatial Information Framework*
  • Highlight Case Studies already provided by the National Experiences

Developing a New Work Plan 2022 – 2024
Coordination Meeting with Regional Stakeholders