Integration of Geospatial Information in SBRs

Hank Hermans
Chair Task Team on SBR
Ilaria Di Matteo
UNSD

6th meeting of the UN Committee of Experts on Business and Trade Statistics
18-22 September 2023

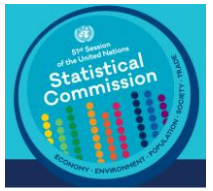
Background

- The United Nations Statistical Commission, at its 53rd session in March 2022

  Requested the Committee of Experts on Business and Trade Statistics (UNCEBTS) to develop guidelines to assist countries to integrate geospatial information into SBRs building on country experiences

The TT-SBR included in its work plan the preparation of a report on the "*Integration of geospatial information in SBRs*" to be submitted to the next UNSC in March 2024

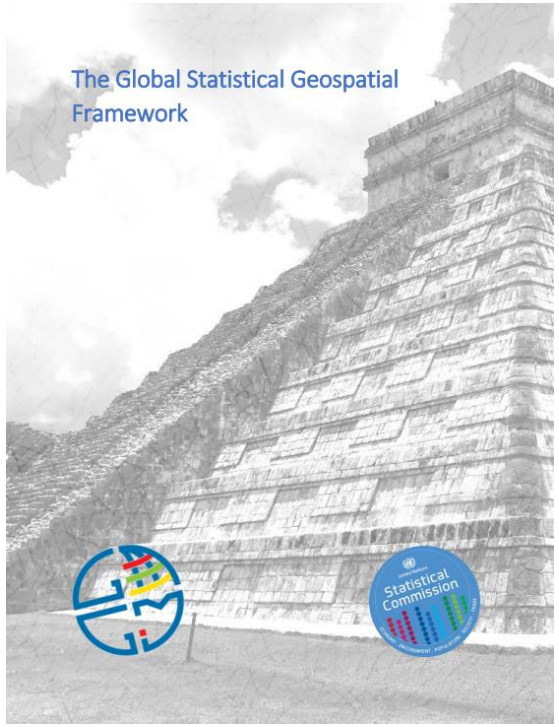
- The *Global Statistical Geospatial Framework* (GSGF), developed by the UN Expert Group on the Integration of Statistical and Geospatial Information (EG-ISGI), was endorsed in 2020 by the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) and the UNSC



- Close collaboration between the TT-SBR and EG-ISGI to ensure that the report is in full alignment with the GSGF

Global Statistical Geospatial Framework (GSGF)

- The GSGF provides the framework to facilitate the integration of statistical and geospatial information, between NSOs and National Geospatial Information Agencies (NGIAs)
- Developed by the UN Expert Group on the Integration of Statistical and Geospatial Information (EG-ISGI)
- Endorsed by United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) in 2020 and by the UNSC in 2021



- The GSGF contains five Principles:
  1) Use of fundamental geospatial infrastructure and geocoding;
  2) Geocoded unit record data in a data management environment;
  3) Common geographies for the dissemination of statistics;
  4) Statistical and geospatial interoperability; and,
  5) Accessible and usable geospatially enabled statistics.

Principle 1: Use of fund geospatial infrastructu geocoding

Implementation of Principle 1 ach following objectives:

- Address, property, building, a information are accurate and meeting country-level agreed good practices;
- Geocoding results are as accu consistent as possible using c approaches or systems; and,
- Any geocoding issues are con managed through application standardized approaches.

Principle 2: Geocoded unit record data in a data management environme

Implementation of Principle 2 achieves th following objectives:

- All statistical microdata is geospatially e for flexible use in analysis, visualization, dissemination and statistical data integrat processes;
- Aggregation of data for larger geograph simplified through storage of a unique ide or code for a small area geography or sta grid cell for each unit record;
- Adaptation to changes to existing geogr or to allow compilation of data for new geographies is enabled;
- Data can be effectively managed, includ the protection of privacy and confidentia
- Clear data maintenance and custodians roles are defined; and,
- Geocoded information and metadata ar consistent, interpretable and systematicall maintained.

Principle 3: Common geographies for dissemination of statistics

Implementation of Principle 3 achieves the following objectives:

- Data from different sources can be integrated using a common geography;
- The visualisation, analysis and interpretation of statistical and geographic information is simplified;
- Metadata supports data aggregation, integration and use;
- Identification and application of aggregation and disaggregation methods will enhance data quality and the assessment, consistency and increased use of data; and,
- The conversion of data between geographies is supported, through standard conversion mechanisms (e.g. through correspondences

Principle 4: Statistical and geosp Interoperability

Implementation of Principle 4 achieves th following objectives:

• Greater efficiency and simplification in creation, discovery, integration and use o geospatially enabled statistics and geospa data;

• Ensures service-based or machine-read access mechanisms (e.g. through APIs) ar implemented to provide greater efficienc access and use, and to allow adaptation

and evolution of uses through time; and,

• Increases the potential application of a range of data and technologies.

Principle 5: Accessible and usable geospatially enabled statistics

Implementation of Principle 5 achieves the following objectives:

• Data custodians can release data, with data privacy and confidentiality protected;

• Data users can discover and access geospatially enabled statistics;

• Data users can undertake analysis and visualisation;

• Web services and linked data methods enable machine-tomachine access, as well as dynamic linkage of information; and,

• Data users can know the status of modifications / changes in the data provided by data custodians through data integrity checks.

Report on the integration of geospatial information in SBRS

- The main objective of the report is to provide guidelines
- It mainly covers the following sections:
  - What is geospatial information and benefits of integrating it in the SBR
  - What it means integrating spatial information in the SBR
  - How is geospatial information maintained
  - How to integrate geospatial information in the SBR
  - Country examples of the benefits of the integration

Thank you!