UNECE Activities on Integrating Statistical and Geospatial Information

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Exploring Opportunities

Photo by Javier Allegue Barros on Unsplash
Main Events: 2021

- Eurostat / UN-GGIM: Europe / UNECE Meeting on the Integration of Statistical and Geospatial Information, **On-line**, 24 March
- “Coffee Talks”
  - Defining urban areas and modelling urban area data
  - Developments in applying global grids
  - Geospatial and statistical standards
Geospatial view of GSBPM

- Description of how geospatial information can be used across all stages of the statistical production process
GSBPM and GSGF

GSBPM as tool to ensure GSGF principles to be followed

Immediate connection

SOURCE: Australian Bureau of Statistics (ABS) / UN-GGIM, Illustration by Statistics Sweden

Figure 2: The Global Statistical Geospatial Framework (GSGF)
Geospatial view of GSBPM (GeoGSBPM)

Developed by Geospatial task team of HLG-MOS Supporting Standards Group
Geospatial view of GSBPM

Example of GSBPM sub-process 2.2 Design variable description

2.2 Design variable description

28. This sub-process defines the variables to be collected via the collection instrument, as well as any other variables that will be derived from them in sub-process 5.5 (Derive new variables and units), and any statistical or geospatial-classifications that will be used. It is expected that existing national and international standards will be followed wherever possible.

29. Geospatial variables (geographies) that are used while collecting data at a statistical unit level are not usually the same as those that are used for dissemination. Hence, they should be designed at the statistical unit level using point-based location\(^8\) as the base geospatial variable, as it will provide a considerable adaptability to changes over time and flexibility to aggregate up to various dissemination-level geographies. For gridded geographies, it is important to use a grid system that is comparable with the existing regional or global grid system (e.g. Discrete Global Grid System (DGGS)\(^9\)) as it will greatly increase usability of the output. Different types of grid (e.g. hexagon, rectangular) and their advantages and disadvantages can be assessed when designing gridded geographies.

30. This sub-process may need to run in parallel with sub-process 2.3 (Design collection), as the definition of the variables to be collected, and the choice of collection instruments may be inter-dependent to some degree. Preparation of metadata descriptions of collected and derived variables, statistical and geospatial classification is a necessary precondition for subsequent phases.
GeoGSBPM describes geospatial-related activities and considerations using the framework of the GSBPM.
GeoGSBPM – Opportunities

- Help production of geospatially enabled statistics to be conducted in a systematic and consistent way.
- Provide a common framework to manage quality and metadata of statistical and geospatial information and services.
- Facilitate sharing of geospatial services, methods and tools that can be applied regardless of data types, domains and output formats.
Opportunities in data

Opportunities in metadata

Population census methodology: 2020 round

https://statswiki.unece.org/display/censuses/Censuses+of+the+2020+round
Opportunities in data science

https://unece.org/tram-and-metro-data
Opportunities in data science

Road fatality score (deaths per million inhabitants)

https://stats.unece.org/infocard/en/040/
Looking forwards

- New project with Eurostat (tbc)
- Dedicated expert for geospatial information
- New work on standards and interoperability
- Capacity development activities
- Joint session of Conference of European Statisticians and UN-GGIM: Europe – 21 June
- “Real” meetings 😊
Any questions?