

# New development from HLG-MOS Modernisation Group

Geospatial task team

Prepared by Juan Muñoz

# Participating Institutions



- Statistics Finland
- Australian Bureau of Statistics
- Federal Statistical Office of Germany
- Statistics Sweden
- INEGI Mexico
- INSEE France
- Statistics Korea
- Statistics Poland
- Statistics Canada
- Central Statistics Office of Ireland
- International Labour Organisation
- Data Documentation Initiative
- Eurostat
- UNECE



International  
Labour  
Organization



DATA DOCUMENTATION INITIATIVE



**eurostat**

Your key to European statistics



**UNECE**



Statistics Korea



Statistics Poland



Statistics  
Canada

Statistique  
Canada



An  
Phríomh-Oifig  
Staidrimh

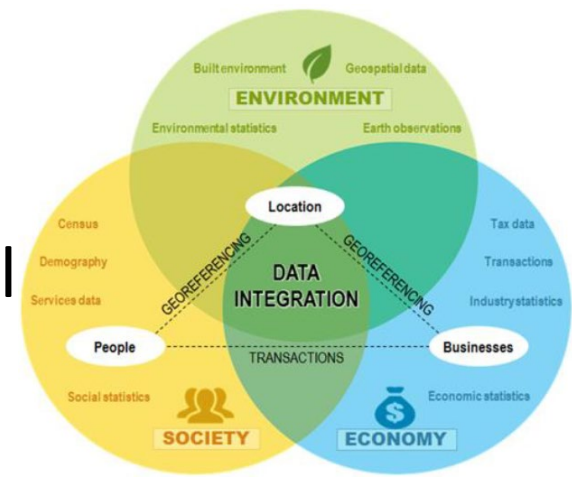
Central  
Statistics  
Office

modernstats

HLG - MOS

# References

- UN-GGIM Expert Group on Integration of Statistical and Geospatial Information (EG-ISGI). Global Statistical Geospatial Framework (GSGF),
  - **Objective:** The integration of statistical and geographical information to improve the quality of the evidence we use to make present and future decisions.
- Working Group on Data Integration. Workshop on Integrating Geospatial and Statistical Standards (UN-GGIM Europe 2017).
  - **Objective:** To identify European issues relevant to geospatial information management and recommend necessary actions on them for the furtherance of the discussions in UN-GGIM so that the economic, social and environmental benefits of European geospatial information are maximized
- European Statistical System. Eurostat Grant Project: GEOSTAT. Input from project reports (2015-2019) and current activities
  - **Objective:** To foster a better integration of statistics and geospatial information for the statistical community to provide more qualified descriptions and analyses of society, economy and environment.
  - **Main focus:** To develop the European version of the Global Statistical Geospatial Framework (SGF) and integrate statistics and geospatial information.



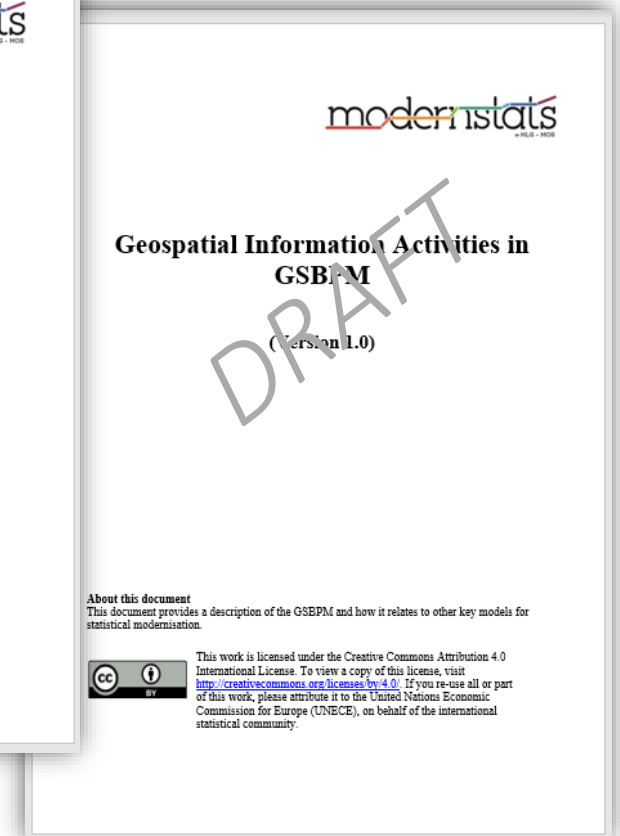
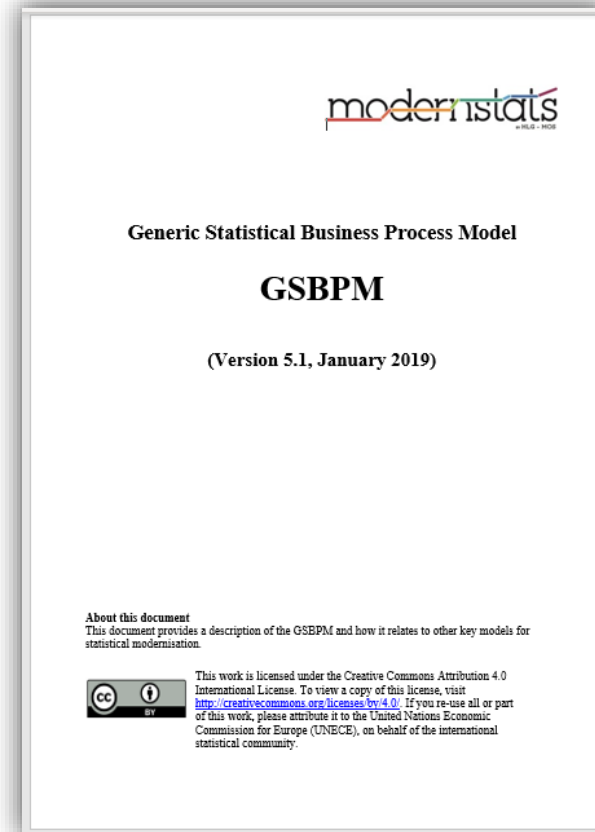
Task	Description	Status	Responsible
1. Specify needs phase	The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'...		
1. Identify needs	The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'...		
2. Conduct and confirm needs	The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'...		
3. Identify relevant stakeholders	The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'...		
4. Identify resources	The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'...		
4. Check data availability	The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'...		
4. Prepare documentation	The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'... The project is currently in the 'Specify needs phase'...		

# Identified Use Cases

- Use of geospatial information to produce geospatially-enabled statistics.
- Use of geospatial information to produce geospatial data/product (e.g. enumeration boundary for survey).
- Use of geospatial information to conduct geospatial analysis of statistical information.
- Use of geospatial information to support statistical production.
- Representation of geospatial information in statistical data modelling

# Deliverable of the Task Team

A document describing geospatial related activities under each phase/sub-process of GSBPM.



# Progresses

Specify  
Needs

Design

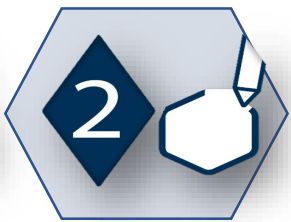
Build

Collect

Process

Analyse

Disseminate Evaluate



# Some Aspects of Geospatial Information Along the Statistical Production Process

- Phase 1: Specify Needs
  - Identification of the geospatial information that can be collected and its level of precision
  - Identification of needed geospatial products and services
  - Check available geospatial information and the resources and tools to manage it
  - Analysis of aspects like cost-benefit, return of investment, and privacy
- Phase 2: Design
  - Geospatial comparability needs to be considered
  - The statistical design must address the collection sources and instruments for the variables that will manage this kind of data, where precision and standards to fulfill are part of this design
  - Geospatial sampling can have an important role to improve the quality and relevance of the information, and the efficiency of the field work too
  - Different codification and classification strategies will be part of the design of the processing and analysis of the information
  - Production of non-existing geospatial information may require the coordination of different institutions. The workflows, systems and tools to be used will be specified during this phase.

# Some Aspects of Geospatial Information Along the Statistical Production Process

- Phase 3: Build
  - Development of geospatial data models and the services to provide new ways to use the statistical information
  - The use and re-use of collection and dissemination components and tools
  - Standards will be used to document spatial metadata and services that will be useful to clarify and to make information findable.
  - Components build to disseminate geospatial information must be tested against confidentiality/privacy breach risks
- Phase 4: Collect
  - Costs of gathering information can be reduced using geospatial information, but other uses like detecting undercounted regions, or monitoring development of fieldwork are important too
  - During data collection update and validation of available geospatial data can be made to reflect the dynamics in the geography and the distribution of the statistical units
  - Geospatial data quality must be integrated into the documentation of the statistical collection



# Some Aspects of Geospatial Information Along the Statistical Production Process

- Phase 5: Process
  - Integration of geospatial and geographical information can be made in several ways, from geocoding against existent code lists to matching and validation of this kind of data used for the creation of new contents by deriving new variables and units
  - Geospatial information can be used for Edition and Imputation of statistical variables
  - Standardising location information is critical to ensure that quality of integration not only for immediate data integration task but for potential uses in the future, particularly for geospatial analysis.
  - Several considerations are needed when integrating geospatial information from different sources
  - Quality of statistical information will be affected by the characteristics of geospatial information

# Work to Be Done

- Finishing the review of the remaining phases of the GSBPM
- Addition of Overarching process
- Obtaining feedback from the statistical community
- Edition of the final version of the document
- Including activities into GAMS0

# Questions?

[Juan.Munoz@inegi.org.mx](mailto:Juan.Munoz@inegi.org.mx)