

## UN-GGIM: Europe and GeoSTAT - Agenda

UN-GGIM:Europe
Modern Map Production
Global Statistical Geospatial Framework
Resume

# UN-GGIM: Europe [https://un-ggim-europe.org/about-us/]

Established in July 2011 through a resolution by the United Nations Economic and Social Council (ECOSOC),

- the United Nations initiative on Global Geospatial Information Management (UN-GGIM) draws on the national capacities and capabilities of Member States.
- It takes a leading role in setting the agenda for global geospatial information development and
- promotes the benefits of geospatial information for addressing national policy and key global challenges.





#### The aim of UN-GGIM: Europe is

- to ensure that the national mapping and cadastral authorities and national statistical institutes in the European UN Member States, the European Institutions and associated bodies work together
- to contribute to the more effective management and availability of geospatial information in Europe, and
- its integration with other information, based on user needs and requirements.

## Modern Map Production

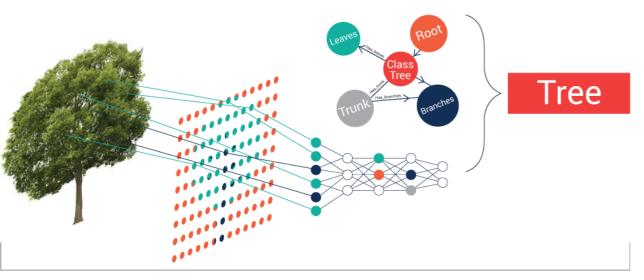
- Web of Data
- Distributed Sources
- Inhomogeneity
  - content,
  - quality,
  - lineage,
  - license models ...
- Delivery requirements (supply chain)



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### Modern Map Production: Paradigm Change

- Collect, Store and Process> VS.
  - <Find, Bind, (Re-)Use>
- Decentralized SDI



"see" "read" "hear" machine-readable definitions

https://ontotext.com/wp-content/uploads/2018/04/What-is-Semantic-layer.png

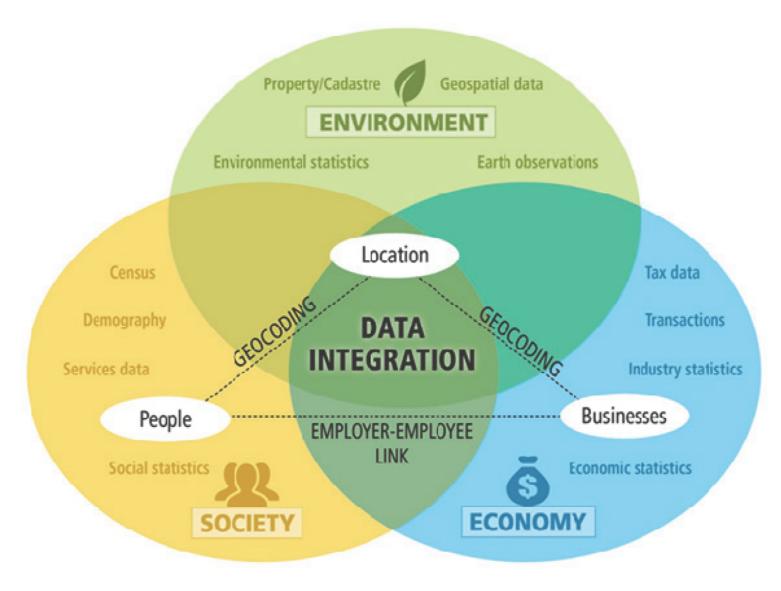
https://upload.wikimedia.org/wikipedia/ commons/e/ee/AWI-core-archive hg.ipg





https://todcan.com/wp-content/ uploads/2018/02/archive.jpg

#### Linking society, economy and environment through data integration



Source: Statistics Australia and Statistics New Zealand.

#### Processes involving geospatial integration

- 1) Specify needs: Find out what the users need; promote geospatial statistics and the potential of geospatial information.
- 2) Design: Recognise geospatial data sources; assess data processing capacity; specify geospatial statistics output.
- **3) Build**: Create a flexible production set-up; build the geocoded survey frame.
- 4) Collect: Obtain and manage geospatial data.
- **5) Process**: Conduct geospatial data quality assessment; assess identifiers to enable correct data linkage; geocode data; prepare geospatial statistics products.
- 6) Analyse: Assess data dissemination constraints.

[according to GEOSTAT2 report, HALDORSON, M.–MOSTRÖM, J. (2018): Implementing the Statistical Geospatial Framework at Statis-tics Sweden, National Report as part of the GEOSTAT 3 project https://www.efgs.info/wp-content/uploads/geostat/3/Impementing-the-GSGF-at-Statistics-Sweden-0.96\_Draft\_for\_GEOSTAT.pdf (downloaded: August 2018) ]

## Principles of the GSGF (Global Statistical Geospatial Framework)

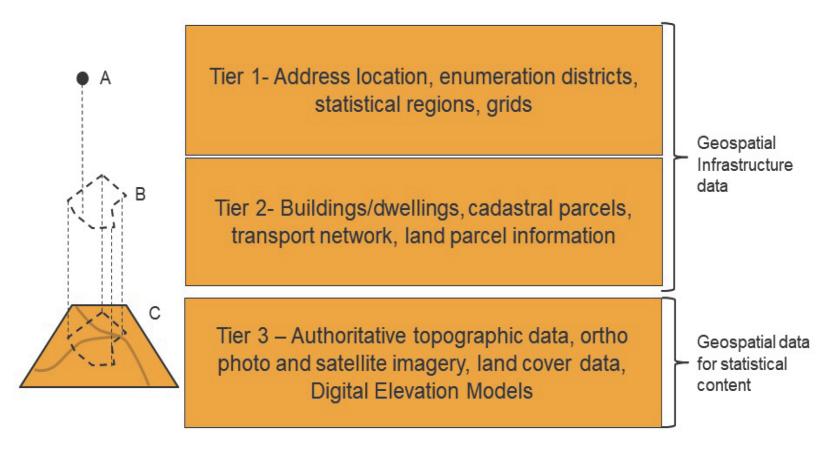
5. Accessible and usable

- **4.** Statistical and geospatial interoperability
- **3.** Common geographies for dissemination of statistics
- 2. Geocoded unit record data in a data management environment
- **1.** Use of fundamental geospatial infrastructure and geocoding

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

GSGF Europe - Implementation guide for the Global Statistical Geospatial Framework in Europe - Proposal from the GEOSTAT 3 project EFGS and Eurostat 2019

#### Statistical-geospatial data model

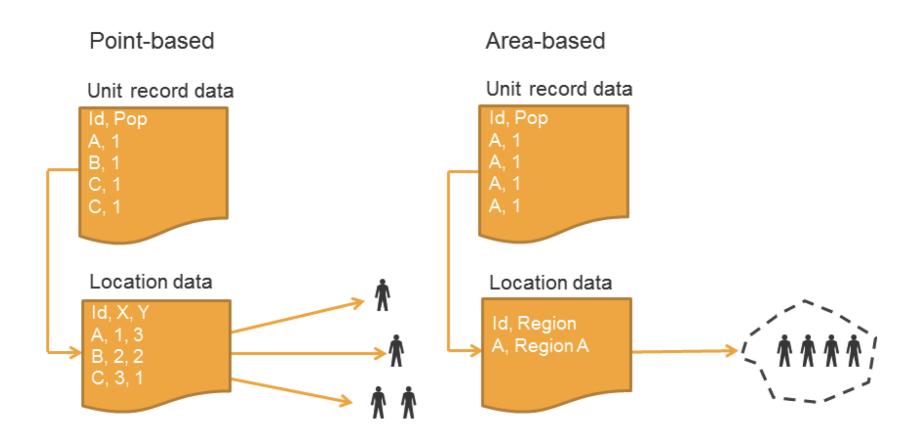


Tiers of information in the generic statistical-geospatial data model for the production and dissemination of statistics.

Regional Statistics, Vol. 9. No. 1. 2019

Online first Haldorson: 1–19; DOI: 10.15196/RS090106

#### Geocoding Infrastructures

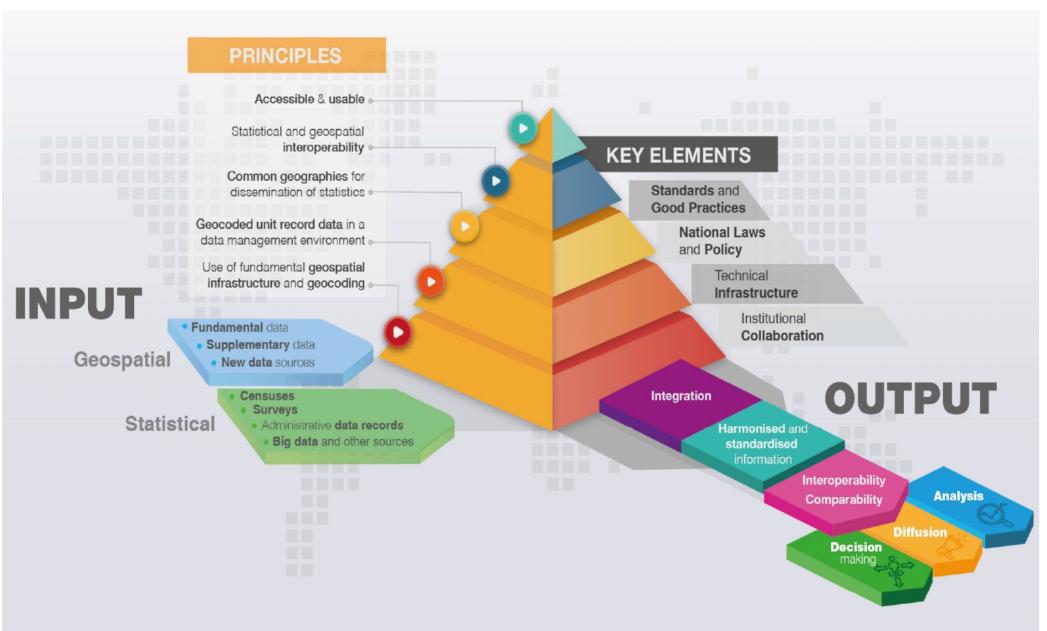


The conceptual difference between point-based and area-based geocoding infrastructures.

Regional Statistics, Vol. 9. No. 1. 2019

Online first Haldorson: 1–19; DOI: 10.15196/RS090106





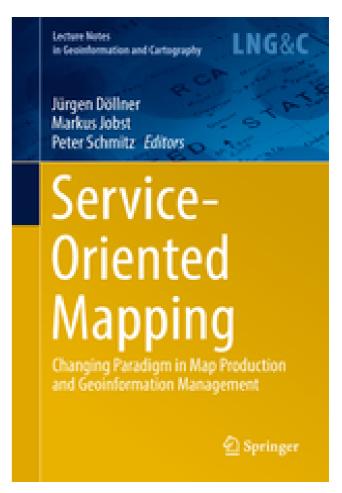
#### Resume GSGF

- The implementation guide identifies some 20 requirements and 80 recommendations. The requirements and recommendations address a wide range of issues and goals
- It is an overwhelming number of tasks, but the implementation of the GSGF in Europe does not require a big-bang approach and a complete redesign of enterprise architectures, production processes and legislation
- Small and stepwise improvements are possible, or even recommended, and countries are advised to start with simple "traffic light assessments"
- Identify the biggest challenges in a national context
- smaller implementation steps should also feed-back into the future revisions of the GSGF and GSGF Europe, e.g. into the planned GEOSTAT 4 project

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