



UN-GGIM: Europe Working Group on Data Integration

Findings, challenges and obstacles



UN-GGIM EUROPE

UNITED NATIONS
COMMITTEE OF EXPERTS ON
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT

Gwendolin Seidner, Pier-Giorgio Zaccheddu, BKG, Germany Carol Agius, Secretariat 2nd United Nations World Geospatial Information Congress, Hyderabad 10-14 October 2022



UN-GGIM: Europe – regional activities









UN-GGIM > Regional Committees

Each UN-GGIM regional committee plays a vital role liaising with the UN-GGIM Secretariat on topics of interest and major developments between meetings of the Committee of Experts, facilitating regional development and discussion, and formally feeding into the Committee of Experts. The five regional committees provide a mechanism for a strong and streamlined regional infrastructure that brings important regional perspectives to the global level and for the outcomes and benefits of the global activities to be disseminated to all Member States in each region.

UN-GGIM Asia-Pacific UN-GGIM Americas UN-GGIM Arab States UN-GGIM Europe UN-GGIM Africa

UN-GGIM EUROPE

Countries

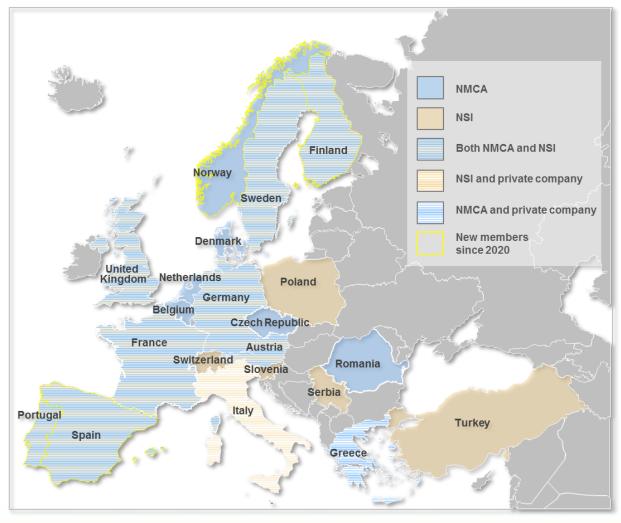
Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Republic of North Macedonia, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, and, Uzbekistan.





Working Group on Data Integration – distribution across

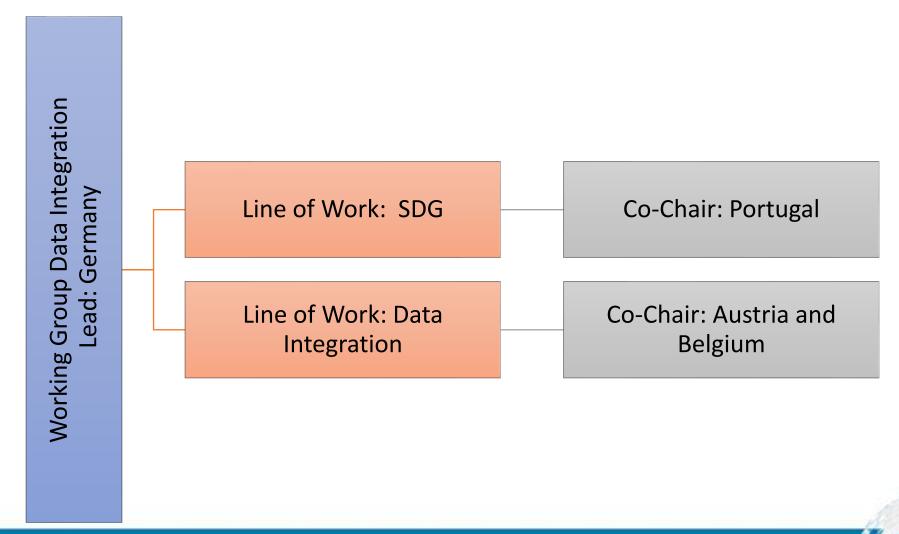
Europe



- from Member
 States affiliated to geospatial and statistical agencies
- Private companies
- Observer
 organisations, like
 Eurostat, JRC, EEA,
 University of Bonn
- Established in 2014



Organisation of the 2 LoW – SDG & Data Integration





Previous UN-GGIM: Europe SDG activities

Work Plan 2017 – 2019 deliverables on SDG indicator analysis



Address the contribution of **geospatial data analysis** and its integration with statistical data at a global, European and national perspective based on the analysis of selected SDG indicators











Coord: NSI, Austria

Coord: NSI, Portugal

Coord: NSI. Sweden

Coord: e-GEOS. Italy

Work Plan 2019 – 2022 deliverables on computing SDG indicators

Provide methodological, operational and technical guidance in the use of geospatial data and statistics to compute SDG indicators, with an European and national perspective, and reflecting on solutions which may increase disaggregation









Harmonised guidelines on the computation of four **SDG** indicators

UN-GGIM: Europe Subgroup on SDGs - Overarching conclusions

PAN-EUROPEAN PRODUCTS MAKE IT POSSIBLE TO COMPUTE SDG INDICATORS	Pan-European geospatial datasets are a first step allowing for a detailed computation at EU level with a good degree of homogeneity and comparability of data for SDG indicators 11.3.1, 15.1.1 and 15.3.1
DATA SOURCES SERVE MORE THAN ONE SDG INDICATOR	Pan-European geospatial products capturing relevant dimensions on land monitoring can serve more than one SDG indictors - the Copernicus Imperviousness Layer (IMD) provides data both for SDG indicators 11.3.1 and 15.3.1
ADMINISTRATIVE BOUNDARIES ARE CORE FOR COMPARABLE CROSS-COUNTRY RESULTS	It is important to have updated authoritative geographies for the definition of local, regional, and national territorial boundaries. At the European level, EuroGeographics is working towards providing easy access to pan-European open data created using official map, geospatial and land information.
HARMONISED TERRITORIAL TYPOLOGIES GUARANTEE COMPARABILITY	The Degree of Urbanisation (DEGURBA) and the Functional Urban Areas (FUA) capture the urban dimension guarantying European/Global comparability for SDG indicators 11.2.1 and 11.3.1
AUTHORITATIVE DATA ON TRANSPORT NETWORKS IS CRUCIAL	Working towards having authoritative data on transport networks and public transport timetables or making EC shared services available for the use of MS is crucial to capture and measure accessibility as proposed for SDG indicator 11.2.1

Geospatial data sources evolve rapidly, and innovation and new products are relevant and necessary. Nevertheless, for statistical STABILITY IS KEY FOR EO DERIVED indicators continuity, periodicity and comparability of data sources is **PRODUCTS** key to meet the standard criteria of statistical information production to quarantee a coherent process of SDG monitoring. For statistical indicators resulting from earth observation classified ACCOUNTING FOR BIAS SHOULD BE data, accounting for bias should be considered. This point is **CONSIDERED WHEN DERIVING** particularly relevant to cope with statistical standards and as the STATISTICS FROM EO level of territorial detail and segmentation of data increases. Dealing with EO based data presents increased levels of complexity in terms of data volume and machine data processing. At the European level, it is important to invest in shared knowledge and COORDINATE SHARED KNOWLEDGE resources on processing workflows, coding, and data processing AND RESOURCES TO DEAL WITH EO solutions, allowing the automatic or semi-automatic extraction of information from satellite images, as well on tools to derive statistics with quality measures. National data sources can complementarily provide other segmentations at national and sub-national level relevant for policy **N**ATIONAL DATA SOURCES CAN monitoring and spatial planning policies at the local level. For SDG PROVIDE ADDITIONAL MEANINGFUL indicator 15.1.1, national data sources can be used to depict data by INSIGHTS types of forest to increase insight on forest monitoring.











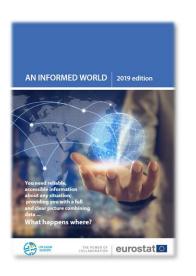
Previous UN-GGIM: Europe Data Integration activities

Work Plan 2017 – 2019: Policy Paper + Leaflet



Develop an outreach document

→ Main audience:
Senior manager in NSIs, NMCA and ministries



Develop a leaflet

→ Main audience:
Policy makers who are not "geospatially related"

Work Plan 2019 – 2022: Report on Data Integration Methods



Collect **national best practice examples** for data integration and describe **methods in the context of the European strategies and developments** (Data spaces, European Green Deal, Geospatial Knowledge Infrastructure)

→ Derive **key recommendations** on Data Integration Methods



UN-GGIM: Europe Subgroup on Data Integration Methods – Key recommendations

- Define and implement valid Persistent Identifier (PID)
- Be aware of new developments like
 Data Spaces
- Have the European political program and the European Green deal and its impact on the further data integration methods in mind
- Develop and implement standardized
 Open APIs for a smart geospatial data provision

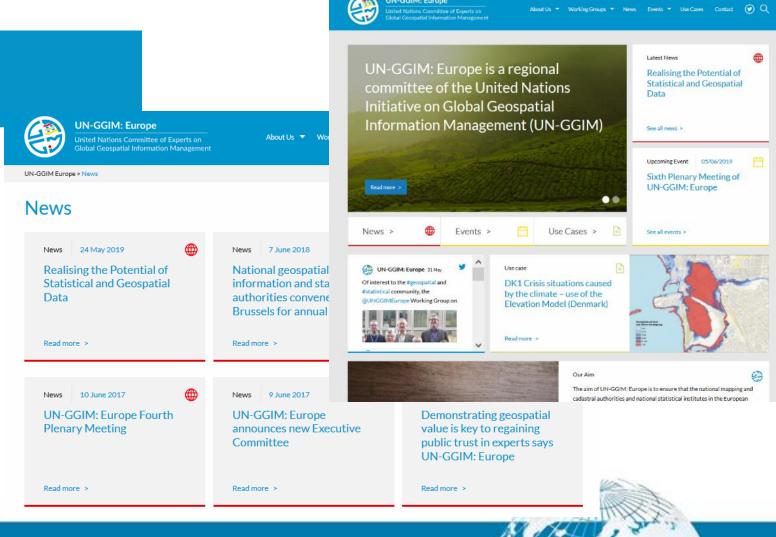
- Agree upon common definitions and enforcement of fundamental geographies and linked data
- Make geospatial and statistical data interoperable and of good quality
- Develop and implement sustainable and automated data integration processes
- Invest resources and capacity building into a cross-domain 'Geospatial knowledge infrastructure (GKI)'

UN-GGIM: Europe: Information & Deliverables



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UN-GGIM: Europe – The future (2022-2025)

- ✓ **New Work Plan** of UN-GGIM: Europe adopted at the UN-GGIM: Europe Plenary on 20 June 2022
- √ 5 Lines of Work







Line of Work – SDG



- To compile and put together use cases/operational examples and produce recommendations/guidelines on the calculation of SDG indicators
- To promote and conduct webinars / guided discussions on specific SDG indicators and/or methodological issues and solutions
- To support and promote capacity building and development initiatives on SDG indicator calculations
- → Link to global IAEG-SDG WG GI





Line of Work – Data Integration







- To compile and put together use cases/discussion papers on best practices on data integration methods and produce recommendations and guidelines
- To promote and conduct webinars on specific topics relevant data integration
- To support and promote capacity building and development initiatives on data integration
- → Link to global UN-GGIM work (EG ISGI)





Way of Working – Toolbox

Focus on Webinars / (virtual) Workshops...







Focus on Workshops...

WORKSHOP

Venue: World Urban Forum, Katowice (POL) and Zoom

OECD Laboratory for Geospatial Analysis

UNECE !







Series of Coffee Talks...

Latest Coffee Talk: Global Grids for Statistical Data - 7 September 2022

Suggestions for additional topics and offers to present work or share experiences are very welcome.

Join the mailing list to receive updates and registration details for these coffee talks - please contact steven.vale@un.org

Previous Coffee Talks:

- Geospatial and statistical standards 18 May 2021
- Developments in applying global grids 29 April 2021
- Defining urban areas and modelling urban area data 25 March 2021
- New opportunities for geospatial and statistical data using the Discrete Global Grid System (DGGS) 25 February 2021
- Innovative methods for defining census areas 2 December 2020

ONLINE WORKSHOP

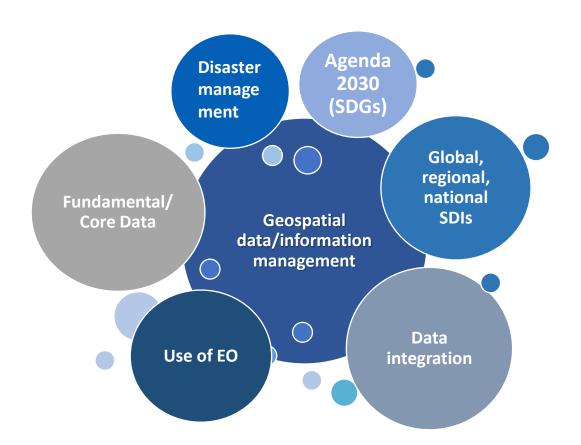
ONLINE WORKSHOP

OECD Laboratory for Geospatial Analysis

Promoting ethical and responsible use of geospatial data



Geospatial is Everywhere!



- → Many stakeholders and activities! It's hard to "keep on track"...
- → Avoid duplication / Link the work and activities





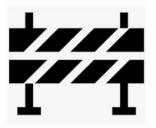
The importance of data integration - findings, challenges and obstacles



- Webinars
- Leaflets
- Guidelines



- Many "Players"
- Avoid duplications



- Technical evolution
- Standards





Questions?

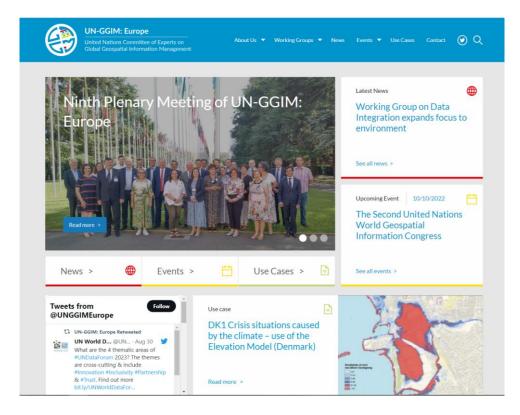
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UN-GGIM: Europe website:

https://un-ggim-europe.org/

