

Report from the UN-GGIM: Europe Working Group on data integration



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EUROPE

UNITED NATIONS
COMMITTEE OF EXPERTS ON
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT

JOINT UN-GGIM: EUROPE – UNECE MEETING ON THE
INTEGRATION OF STATISTICAL AND GEOSPATIAL INFORMATION

Francisco Vala, Statistics Portugal
24 March 2022

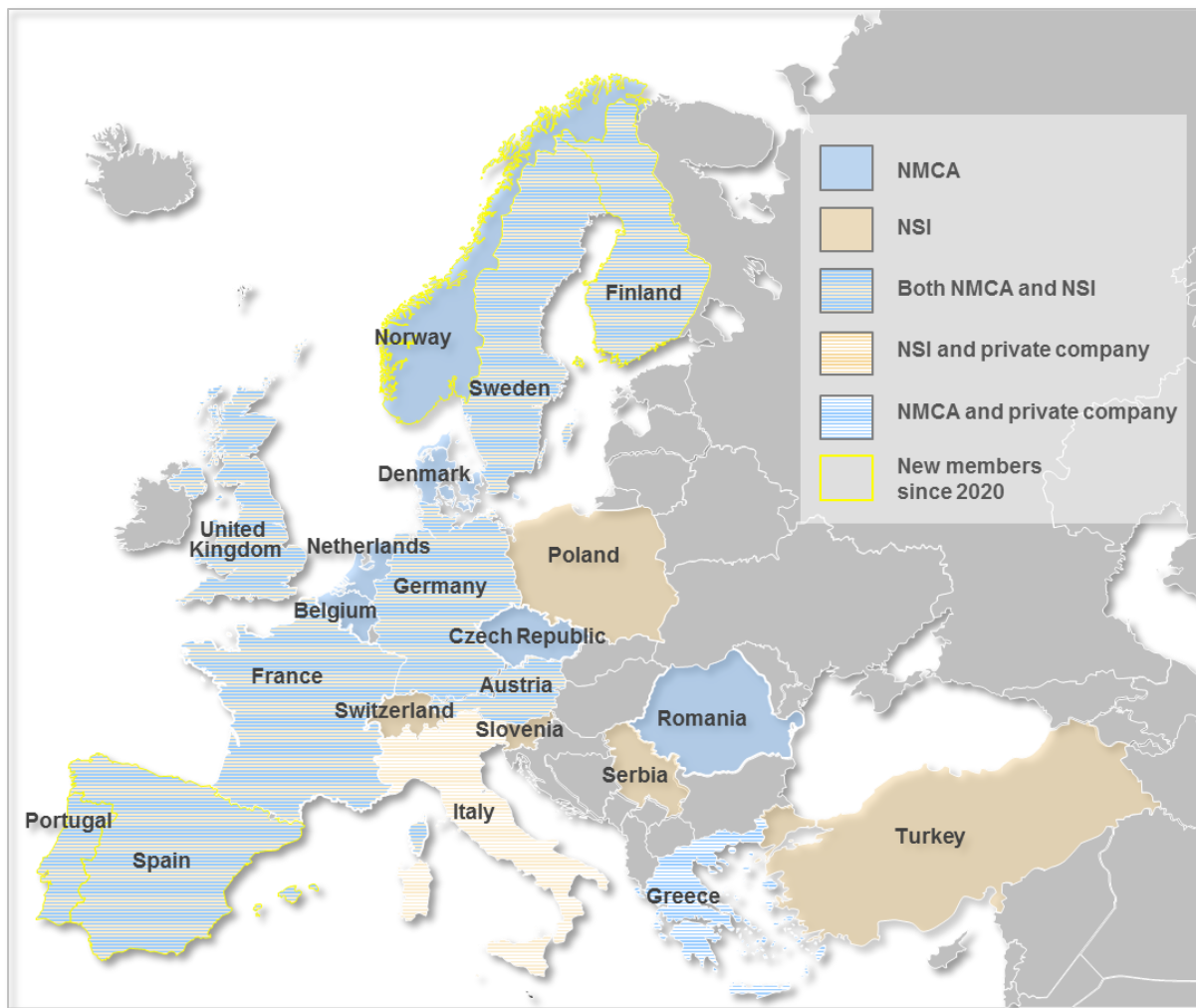


Content

- What have been the tasks of the UN-GGIM: Europe Working Group on Data Integration for 2019-2022?
- What comes next?
- Questions



Working Group on Data Integration – distribution across Europe



- 25-30 members from Member States affiliated to geospatial and statistical agencies
- Private companies
- Observer organisations, like Eurostat, JRC, EEA, University of Bonn



What have been the tasks of the UN-GGIM: Europe Working Group on Data Integration for 2019-2022?

Task 1

Analysing further SDG indicators
→ Subgroup I, led by NSI Portugal

Task 2

Analysing future trends in data integration (methods)
→ Subgroup II, led by NMCA Belgium & Austria

Task 3

Advisory group for data integration issues

What have been the tasks of the UN-GGIM: Europe Working Group on Data Integration for 2019-2022?

Task 1

Analysing further SDG indicators
→ Subgroup I, led by NSI Portugal

Focus today on Task 1 - SDG Analysis!

Outcome and findings of Task 2 were discussed at yesterday's GISCO meeting.

Task 1 SDG indicator analysis (Subgroup I)

Lead: Statistics Portugal (INE)

AIM

Provide methodological, operational and technical guidance in the use of geospatial data and statistics to compute SDG indicators, with a European and national perspective, and reflecting on solutions which may contribute to reduce statistical burden and increase the level of detail of SDG indicators

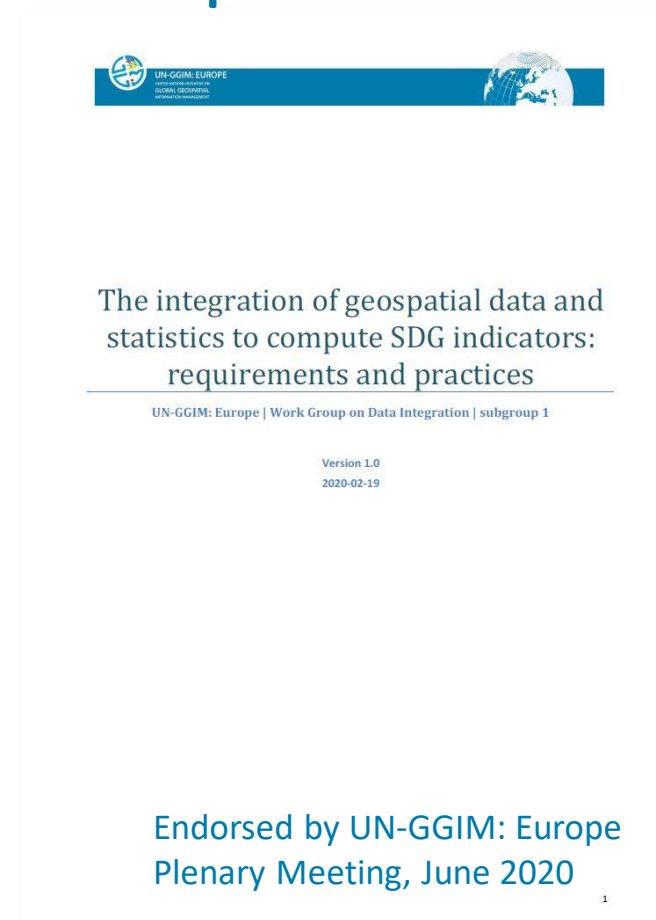
LINES OF WORK

- ✓ **Benchmarking pan-European data sources**
comparative analysis between pan-European and national methodologies, data sources and results
- ✓ **Integration of pan-European data sources with national data sources**
analyse the combination of pan-European with national data sources to extract new relevant information for indicators computation

EXPECTED OUTPUTS

- ✓ **Standard methodological/technical documents**
compiling the solutions analysed and the normative methodological guidance
- ✓ **Flyers/leaflets**
synthesising and illustrating the approaches analysed and the main results

Scoping Paper describing the work planned



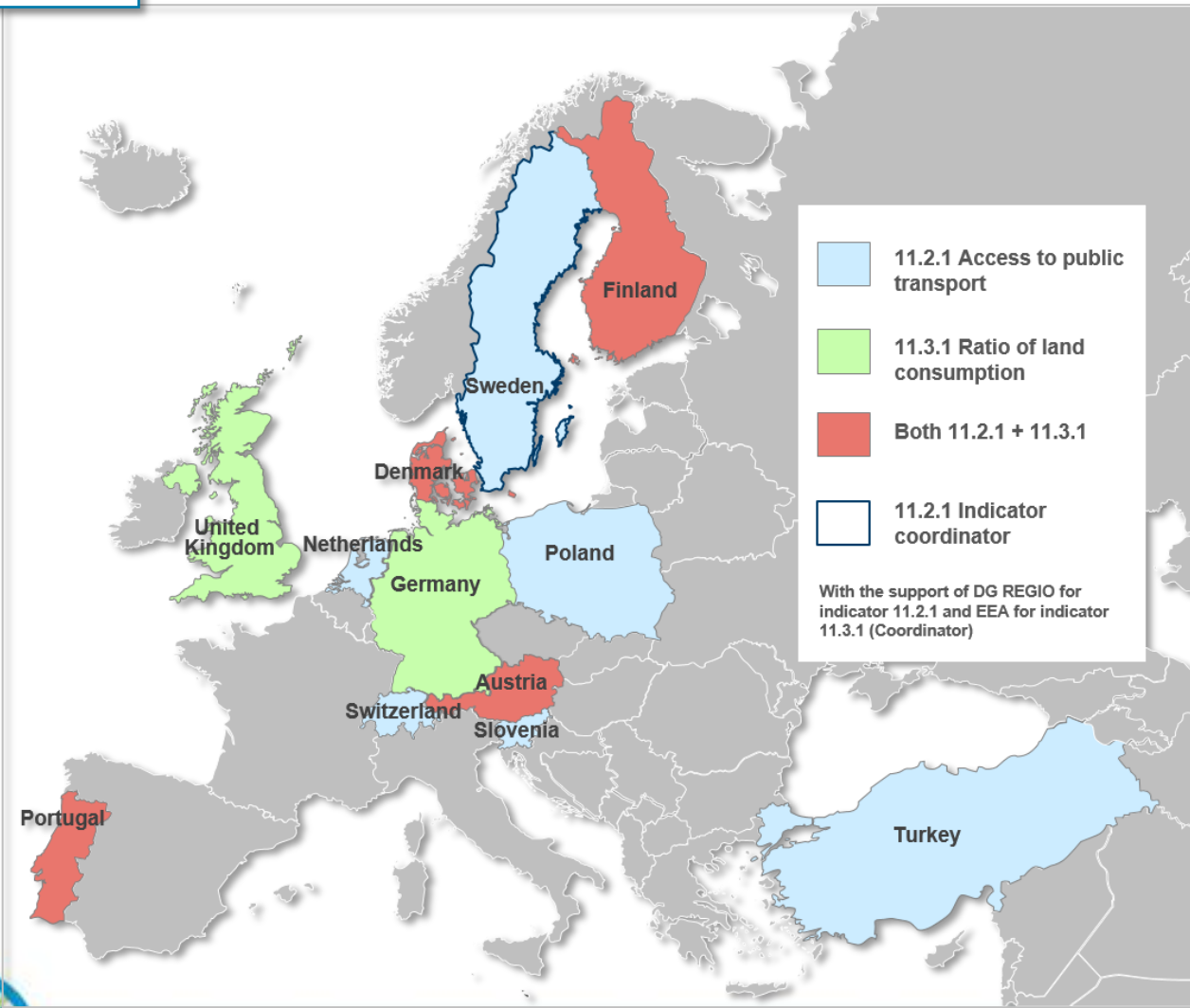
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Task 1

Contribution to Indicator 11.2.1 & 11.3.1

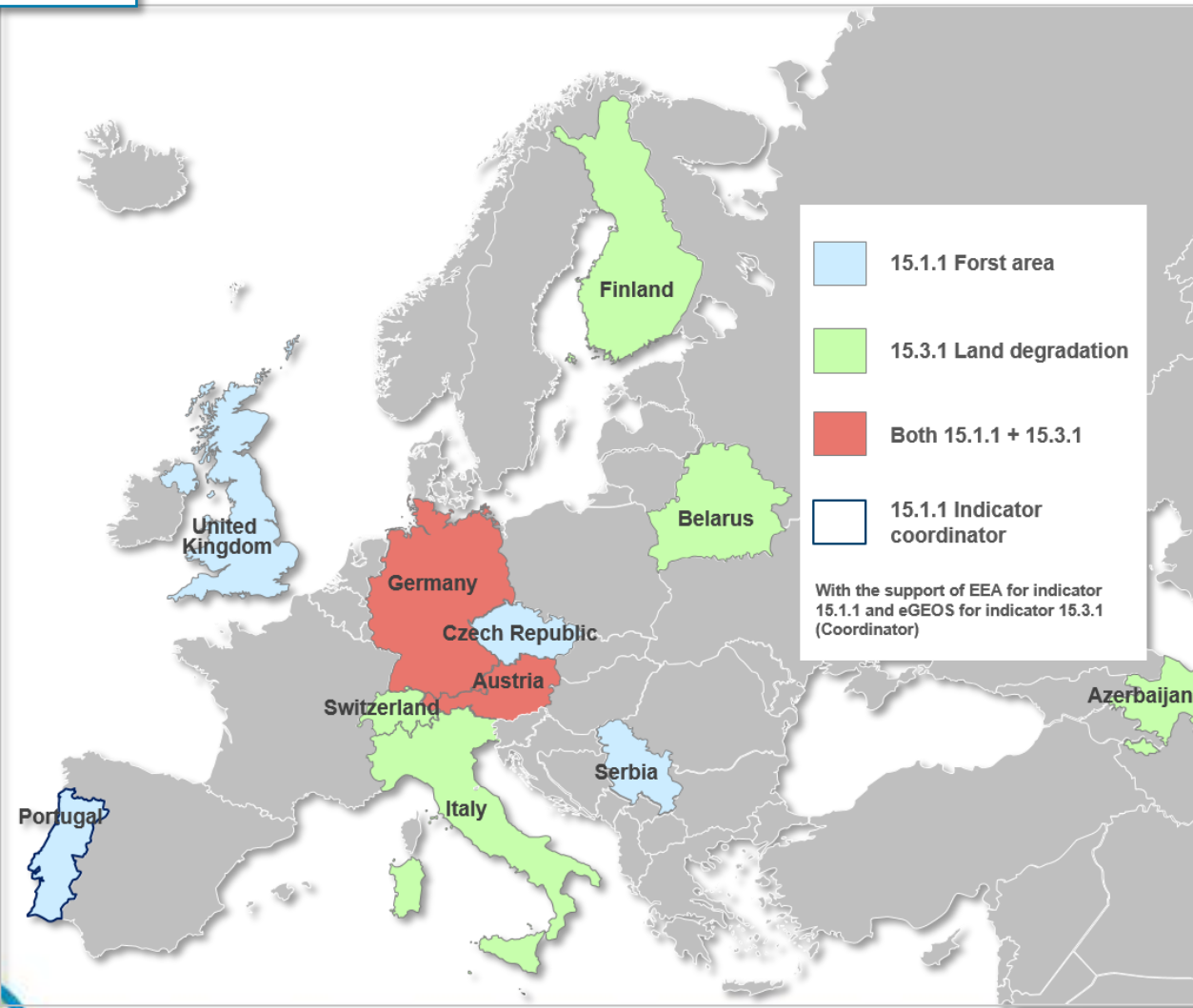


- Input from EEA
- Evaluation and assessment in 2021
- Templates for normative guidance on indicator calculation and recommendations were completed in 2021
- Deliverable
Provision of operational and technical guidance



Task 1

Contribution to Indicator 15.1.1 & 15.3.1



- Input from EEA
- Evaluation and assessment in 2021
- Templates for normative guidance on indicator calculation and recommendations were completed in 2021
- Deliverable
Provision of operational and technical guidance



Task 1



Overarching conclusions

PAN-EUROPEAN PRODUCTS MAKE IT POSSIBLE TO COMPUTE SDG INDICATORS	<i>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</i>	STABILITY IS KEY FOR EO DERIVED PRODUCTS	<i>Geospatial data sources evolve rapidly, and innovation and new products are relevant and necessary. Nevertheless, for statistical indicators continuity, periodicity and comparability of data sources is key to meet the standard criteria of statistical information production to guarantee a coherent process of SDG monitoring.</i>
DATA SOURCES SERVE MORE THAN ONE SDG INDICATOR	<i>Pan-European geospatial products capturing relevant dimensions on land monitoring can serve more than one SDG indicators - the Copernicus Imperviousness Layer (IMD) provides data both for SDG indicators 11.3.1 and 15.3.1</i>	ACCOUNTING FOR BIAS SHOULD BE CONSIDERED WHEN DERIVING STATISTICS FROM EO	<i>For statistical indicators resulting from earth observation classified data, accounting for bias should be considered. This point is particularly relevant to cope with statistical standards and as the level of territorial detail and segmentation of data increases.</i>
ADMINISTRATIVE BOUNDARIES ARE CORE FOR COMPARABLE CROSS-COUNTRY RESULTS	<i>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.</i>	COORDINATE SHARED KNOWLEDGE AND RESOURCES TO DEAL WITH EO	<i>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 resources on processing workflows, coding, and data processing solutions, allowing the automatic or semi-automatic extraction of information from satellite images, as well on tools to derive statistics with quality measures.</i>
HARMONISED TERRITORIAL TYPOLOGIES GUARANTEE COMPARABILITY	<i>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</i>	NATIONAL DATA SOURCES CAN PROVIDE ADDITIONAL MEANINGFUL INSIGHTS	<i>National data sources can complementarily provide other segmentations at national and sub-national level relevant for policy monitoring and spatial planning policies at the local level. For SDG indicator 15.1.1, national data sources can be used to depict data by types of forest to increase insight on forest monitoring.</i>
AUTHORITATIVE DATA ON TRANSPORT NETWORKS IS CRUCIAL	<i>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</i>		



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Task 1



Overarching conclusions

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DATA SOURCES SERVE MORE THAN ONE SDG INDICATOR	Pan-European geospatial products capturing relevant dimensions on land monitoring can serve more than one SDG indicators - the Copernicus Imperviousness Layer (IMD) provides data both for SDG indicators 11.3.1 and 15.3.1	ACCOUNTING FOR THE COMPLEXITY OF EO DATA	Accounting for the complexity of EO data derived from earth observation classified data should be considered. This point is particularly relevant to cope with statistical standards and as the territorial detail and segmentation of data increases.
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 to ensure easy access to pan-European open data on geospatial and land information.	SHARED KNOWLEDGE AND RESOURCES TO DEAL WITH EO DATA	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 resources on processing workflows, coding, and data processing solutions, allowing the automatic or semi-automatic extraction of information from satellite images, as well on tools to derive statistics with quality measures.
HARMONISED TERRITORIAL TYPOLOGIES GUARANTEE COMPARABILITY	The Degree of Urbanisation (DOU) and Functional Urban Areas (FUA) are key indicators for SDG 11.3.1. Europe is working to ensure that these indicators are comparable across countries.	NATIONAL DATA SOURCES CAN PROVIDE ADDITIONAL MEANINGFUL INSIGHTS	National data sources can complementarily provide other segmentations at national and sub-national level relevant for policy monitoring and spatial planning policies at the local level. For SDG indicator 15.1.1, national data sources can be used to depict data by types of forest to increase insight on forest monitoring.
AUTHORITATIVE DATA ON TRANSPORT NETWORKS IS AVAILABLE	Authoritative data on transport networks is available through shared services and open data. This data can be used to capture and measure the impact of transport on SDG indicator 11.2.1.		

Guidelines for all 4 indicators are available at the UN-GGIM: Europe website!



Task 2 Data Integration Methods (Subgroup II)

Lead: NMCA Belgium + Austria

- Analysis of different data integration methods used across Europe like “Table Joining Services” (TJS), “Linked Data” (LD) or “geocoding”.
- The benefits, adequacy of each method to use cases have been scanned and best practices identified and realistic examples of these methods shown.
- Recommendations have been derived from the outcome and findings
- Webinar on 24 February 2022!
 - Evaluation Report on the questions & answers is available
- More information yesterday at the GISCO meeting within time slot ‘Cooperation between NMCA’s and NSI’s’



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- Recommendations have been made based on the findings.
- Webinar on 24 February 2016
 - Evaluation of the webinar is available
- More information on the GISCO meeting within time slot ‘Cooperation between NMCA’s

Deliverable and Outcome of the webinar are available at the UN-GGIM: Europe website



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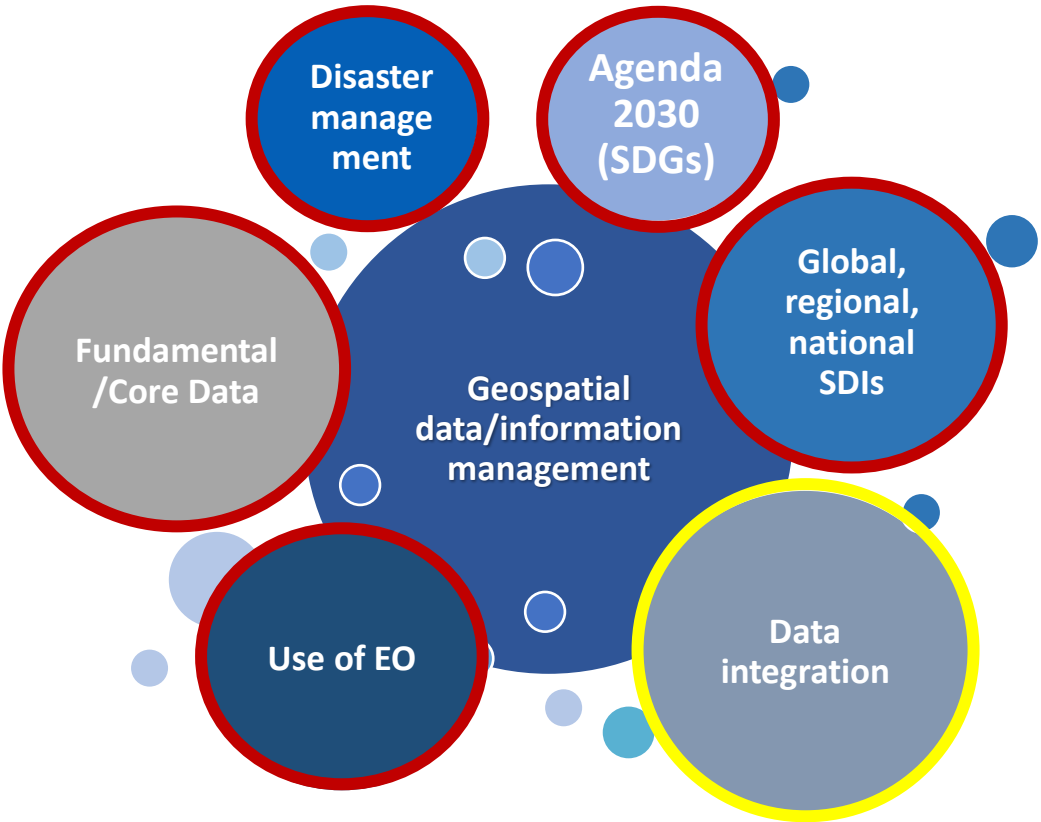
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Task 3

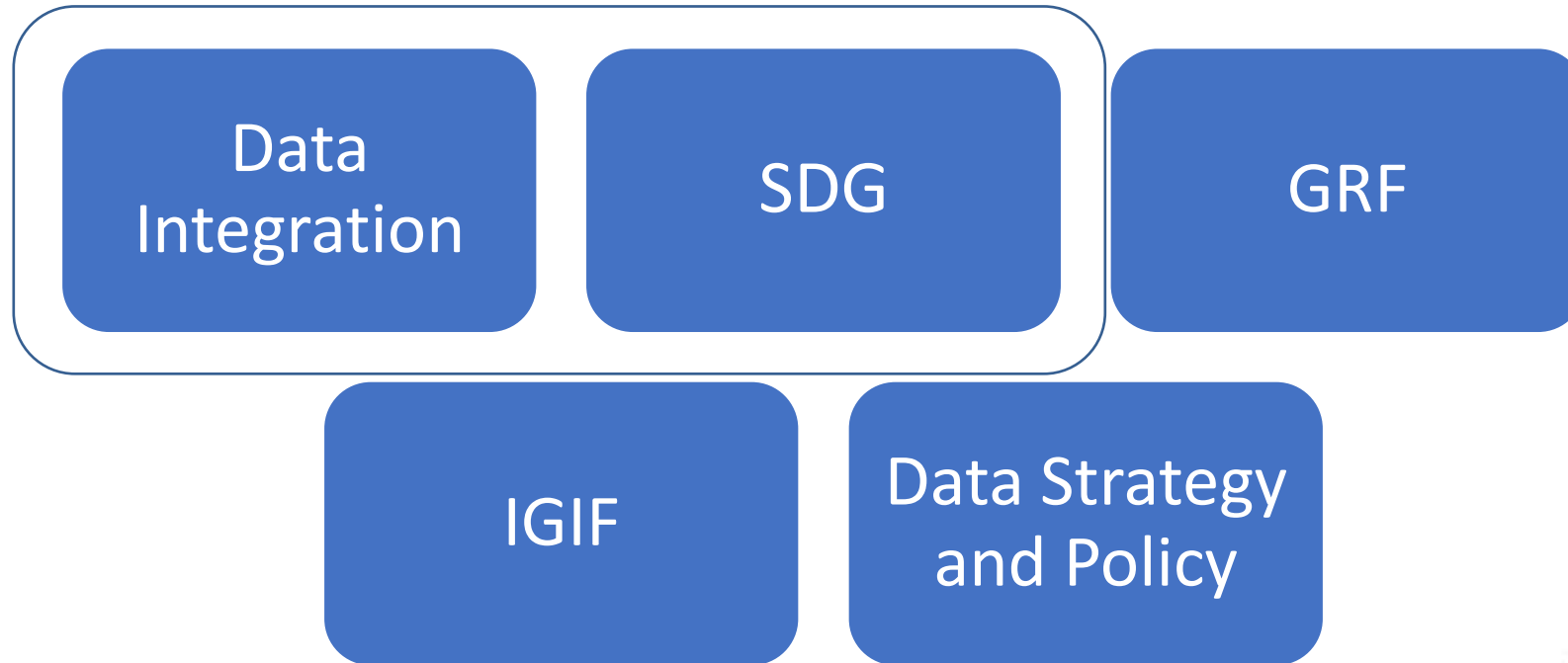
Working Group as “Advisory Group” – a thematic view...

Level	Stakeholder	Topics (keywords)
Global	UN-GGIM, StatCom (→ UN EG ISGI), UN DRR, Group on Earth Observation (GEO), (UN) IAEG SDG, ...	IGIF (GSGF), Sendai, SDGs,...
Europe	UN-GGIM: Europe, Eurostat (GEOSTAT-4) Other EC-DG, EEA,... UNECE, EuroGeographics, ...	GKI/Data spaces, INSPIRE, Copernicus/ EuroGEO,...
National	NSOs, NMCAAs,...	National SDIs,...



What comes next?

- Start of discussion, evaluation and assessment of the **respective/two 'lines of work'** as part of the new Work Plan of UN-GGIM: Europe on **30 March 2022**
- Decision at the **next UN-GGIM: Europe Plenary on 20 June 2022**



Questions?



Contact:

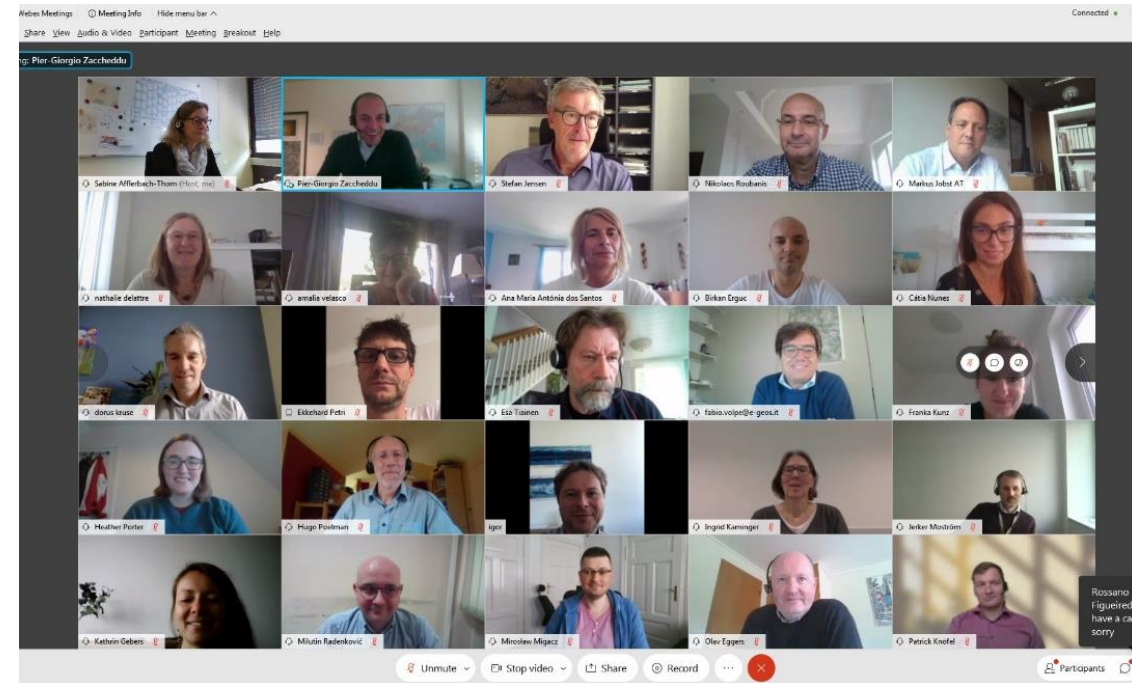
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