SUSTAINABLE DEVELOPMENT GOALS

IAEG-SDGs

Inter-agency Expert Group on SDG Indicators

Working Group on Geospatial Information

Monitoring Agenda 2030
through a geospatial lens

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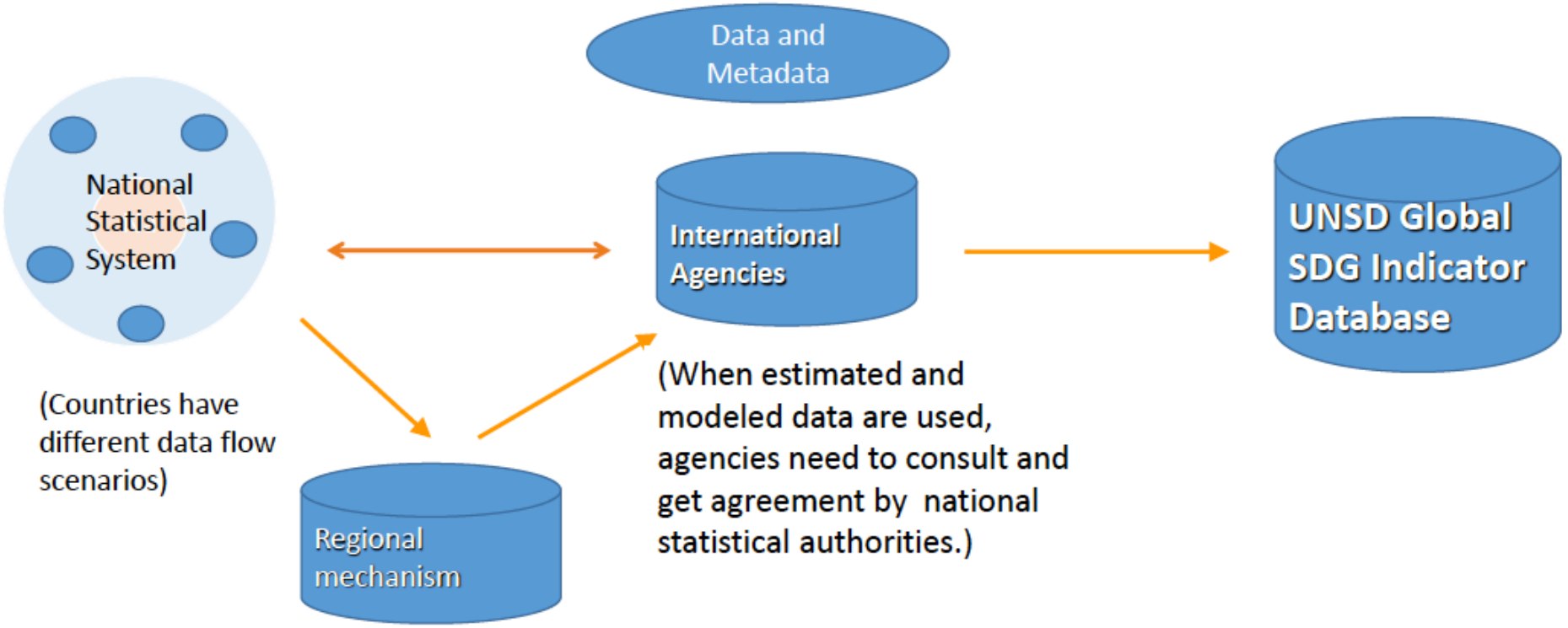
SUSTAINABLE DEVELOPMENT GOALS
1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS
SUSTAINABLE DEVELOPMENT GOALS

Global Reporting Mechanism

Data flow from national to global level



Tasks of the IAEG-SDGs

- Develop the global indicator framework and a list of indicators
- Provide technical support for the implementation
- Review methodological developments, the indicators and their metadata
- Review capacity-building activities
- Report on progress at the global level

Indicator Tier System

- **Tier I**: methodology and standards exist, data regularly produced by countries
- **Tier II**: methodology and standards exist, data are not regularly produced by countries
- **Tier III**: no established methodology and standards, no data

Potential for geospatial and other data sources to address these gaps

IAEG-SDGs Working Groups

IAEG-SDGs has decided to create three working groups:

- Interlinkages
- Geospatial information
- Statistical Data and Metadata Exchange (SDMX)

Membership of the Working Group

Co-Chair:	Sweden	Co-Chair:	Mexico		
Members:	Botswana	*Members:*	Brazil	*Members:*	UN-GGIM: Africa (Ethiopia)
	Cabo Verde		Colombia		UN-GGIM: Americas (USA)
	France		Germany		UN-GGIM: Arab States (tba)
	Jamaica		Uganda		UN-GGIM-Asia Pacific (China)
	Denmark		GWG-Big Data (tba)		UN-GGIM: Europe (Germany)
	WHO		UN-GGIM EG-ISGI (United Kingdom)		UN-GGIM: Europe (Italy)
	EuroStat		OECD		GEO

Tasks will include to consider how geospatial information can contribute to the indicators and metadata:

a) as a direct indicator in itself;

b) to support and augment statistical data;

c) to improve the production process of statistical data;

d) to validate national statistical data inputs;

e) to communicate and visualize the geographic dimensions and context of the indicators where appropriate; and

f) to provide granularity and disaggregation of the indicators where appropriate.

Global indicators needing geospatial data – quick assessment

	Geospatial	Tier I	Tier II	Tier III	Total
1 No poverty	Yes	1	3	2	6
2 Zero hunger	Yes			1	1
3 Good health and well-being	Yes			1	1
4 Quality education	Yes		1	1	2
5 Gender equality	Yes			2	2
6 Clean water and sanitation	Yes	3		3	6
7 Affordable and clean energy	Yes	1			1
8 Decent work and economic growth	Urban/rural?				
9 Industry, innovation and infrastructure	Yes	1		1	2
10 Reduced inequalities	Urban/rural?				
11 Sustainable cities and communities	Yes	2	6	2	10
12 Responsible consumption and production	Urban/rural?				
13 Climate action	Yes		2		2
14 Life below water	Yes	1		3	4
15 Life on land	Yes	3	1	2	6
16 Peace, justice and strong institutions	Urban/rural?				
17 Partnerships for the goals	Capacity, Statistics	∑ 12+	∑ 13+	∑ 18+	∑ 43+

2016/2017 Work Plan

Focus: Consider how geospatial information can contribute to the global indicators and metadata

- Review the global indicators incl. metadata through a 'geographic location' lens
- Identify existing geospatial data gaps, geospatial methodological and measurement issues
- Propose means of addressing these data gaps and issues

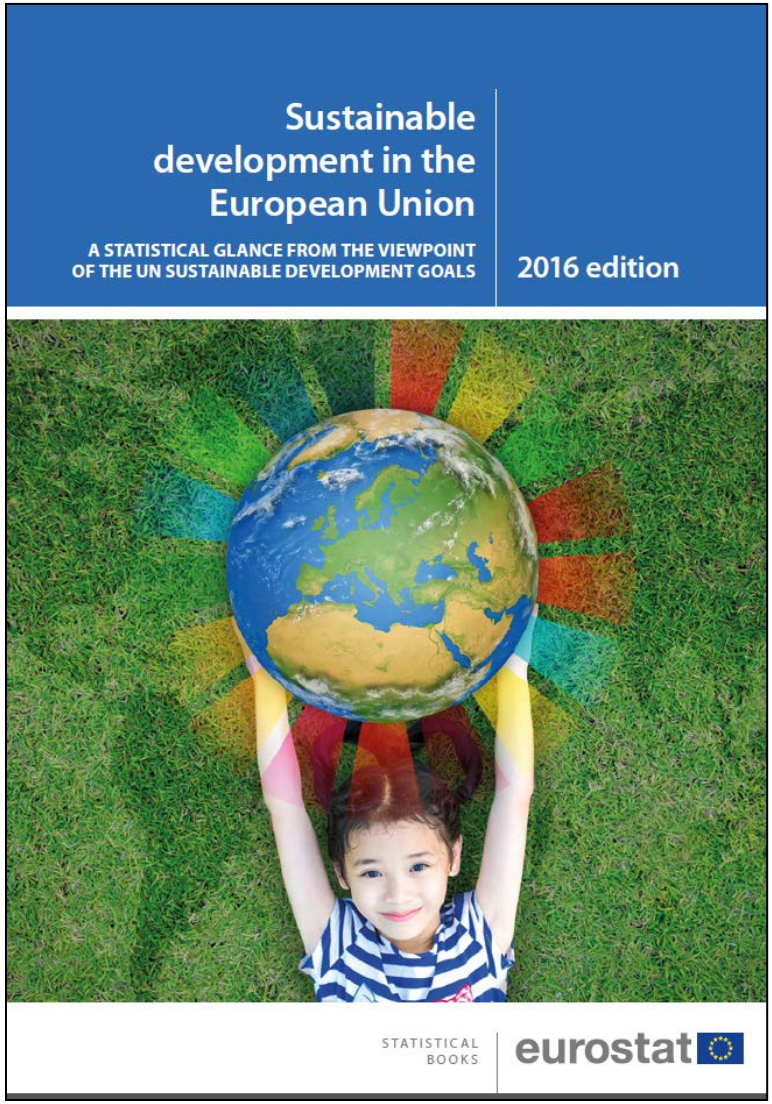
Selected Indicators

- 6.6.1 Change in the extent of water-related ecosystems over time
- 9.1.1 Proportion of the rural population who live within 2 km of an all-season road
- 15.3.1 Proportion of land that is degraded over total land area

Cross-cutting issues

- Task on disaggregation, including urban/rural.
- Task on alternative data sources, including crowd sourced data and VGI.
- Task on national versus global data.

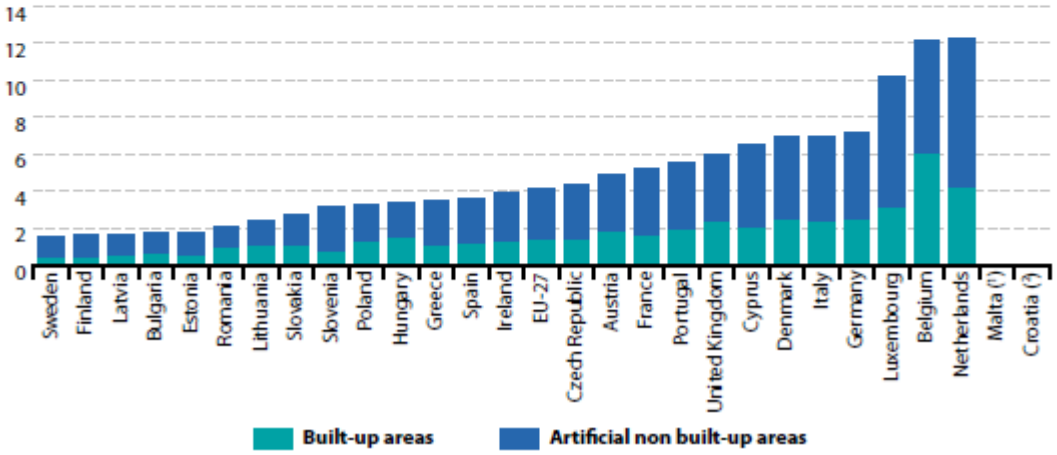
European Indicators



Artificial land cover

Built-up and artificial areas cover 4.1 % of the EU land area (5). According to analysis from the European Environmental Agency (EEA), the share of artificial land areas has been increasing over the past decades, but the rate of land take is slowing down (6).

Figure 15.3: Artificial land cover — built-up and artificial non built-up areas, by country, 2012 (% of total land cover)



Swedish Authorities: Deliver on the SDGs

- 80 Governmental Authorities have reported to the Government how their operations help in achieving the SDGs
- Statistics Sweden offered to:
  - Set up the national indicator system, taking into account existing environmental indicators
  - Provide capacity building in developing countries
  - Provide expertise in the IAEG-SDGs

More information:

http://ggim.un.org/UN_GGIM_wg6.html

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Connections between GEOSTAT-3 and UN GGIM: Europe

Pier-Giorgio Zaccheddu, “International affairs” @ BKG
Federal Agency for Cartography and Geodesy (BKG)

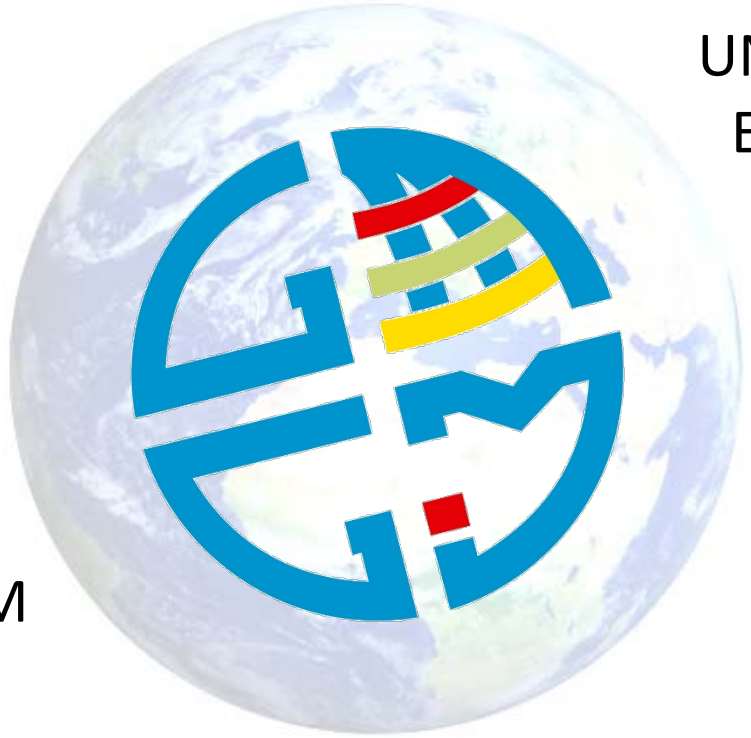
UN-GGIM: roles and tasks

"To make accurate, reliable and authoritative geospatial information readily available to support national, regional and global development"

UN-GGIM: Committee of Experts – Regional Committees

UN-GGIM Europe

UN-GGIM Americas

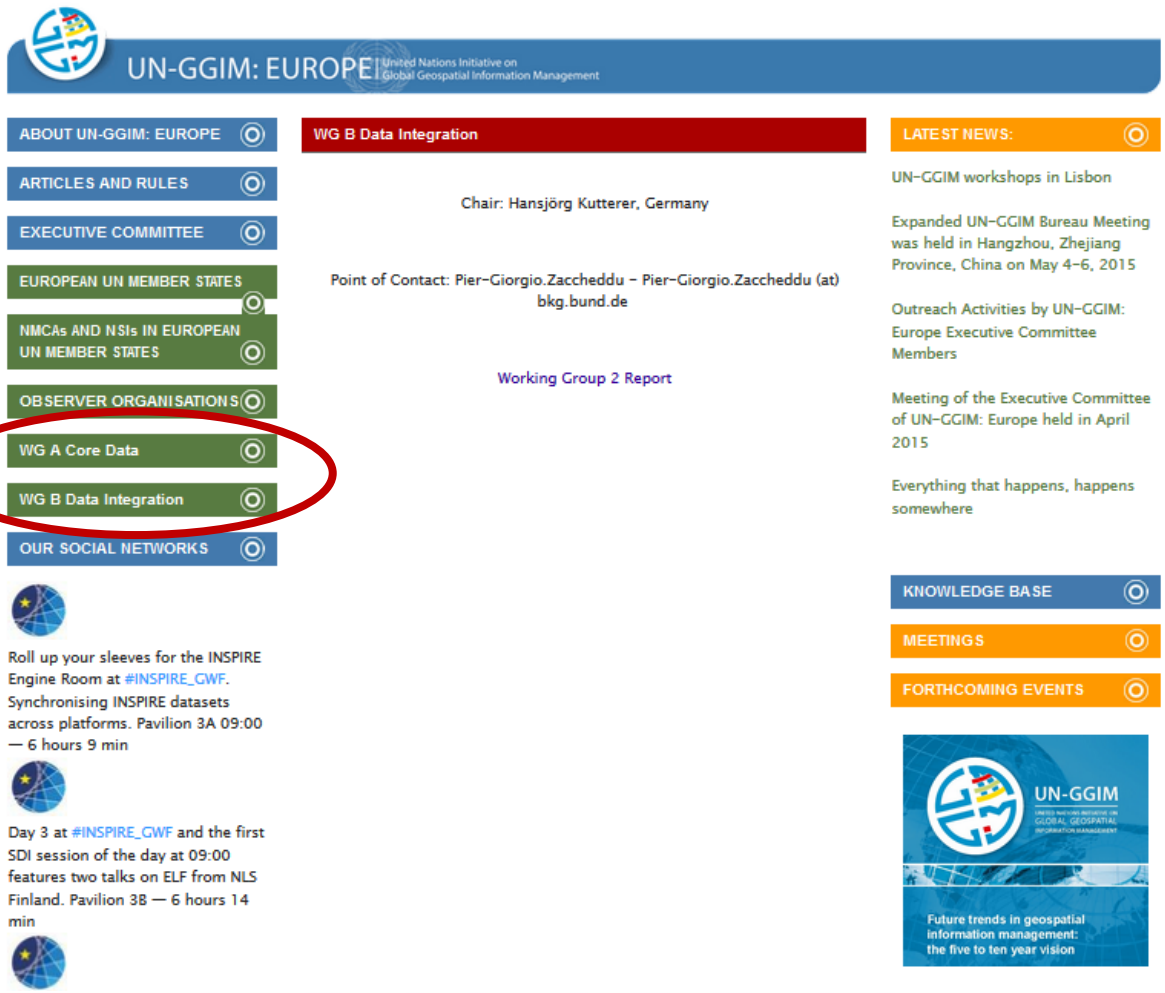


UN-GGIM Arab States

UN-GGIM Africa

UN-GGIM Asia-Pacific

Regional Committee: UN-GGIM: Europe



UN-GGIM: Europe – Work Plan 2015-2018

The substantial part of the proposed Work Plan for 2015 – 2018 is the continuation of the Plan adopted in 2015:

Work Group A: Core Data

1. Specifications of core data (*End of 2016*)
2. Economic model for production & distribution of core data (*End 2017*)
3. Existing political & financial frameworks supporting core data availability (*Mid-2018*)

Work Group B: Data Integration

1. Definition of the priority user needs for data combinations (*accomplished*)
2. Recommendation for implementing prioritized combinations of data (*accomplished*)
   - B.2.1 "The methods of implementing the prioritised combinations of data: Review of current European **Interoperability Frameworks and geospatial and statistical integration projects** regarding methods of combinations of data"
   - B2.2/2.3 "The methods of implementing the prioritised combinations of data: Provide best practice guidance to the **interactions between NMCAs/NSIs/Environmental Agencies** and other relevant organisations. Review current use of data from multiple sources to identify case studies and best practices relevant for combinations with core data."
3. Recommendation how to manage side-effects induced by data combinations (*accomplished*)

UN-GGIM: Europe – Deliverable B2.1

References to the SGF and to the GEOSTAT projects

6.1 Statistical Geospatial Framework

One key development since the beginning of this project, has been the development of the Statistical Geospatial Framework (SGF) on a request from the UN Statistical Commission, and led by the Australian Bureau of Statistics. The SGF has been developed on the concept that essentially all statistical information has a location, and that this location information, if recorded and stored, could be used as an evidence base to inform decision making. Building on several prior works such as the Australian national SGF, other national best practices, and the results of the GEOSTAT projects in the European Statistical System (ESS), ABS undertook a project to look at the challenge of linking spatial and statistical information, and how the integration could happen to achieve the required levels of integrating statistical and geospatial information[6].

The Statistical Geospatial Framework is a high[illegible] generic, framework that consists of five principles which are considered essen[illegible]tegrating geospatial and statistical information. The five principles cover all phase[illegible]al production, from data collection to dissemination. They are underpinned usin[illegible]ndards, best practice and interoperable frameworks[7].

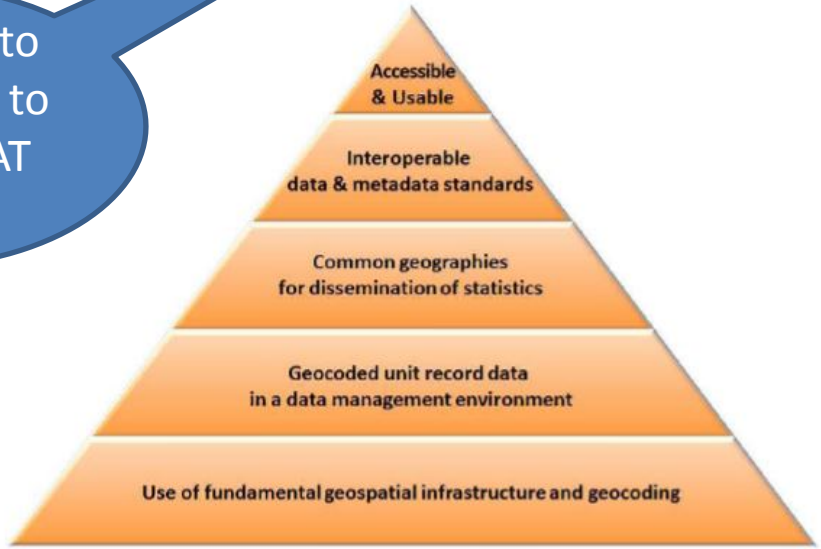
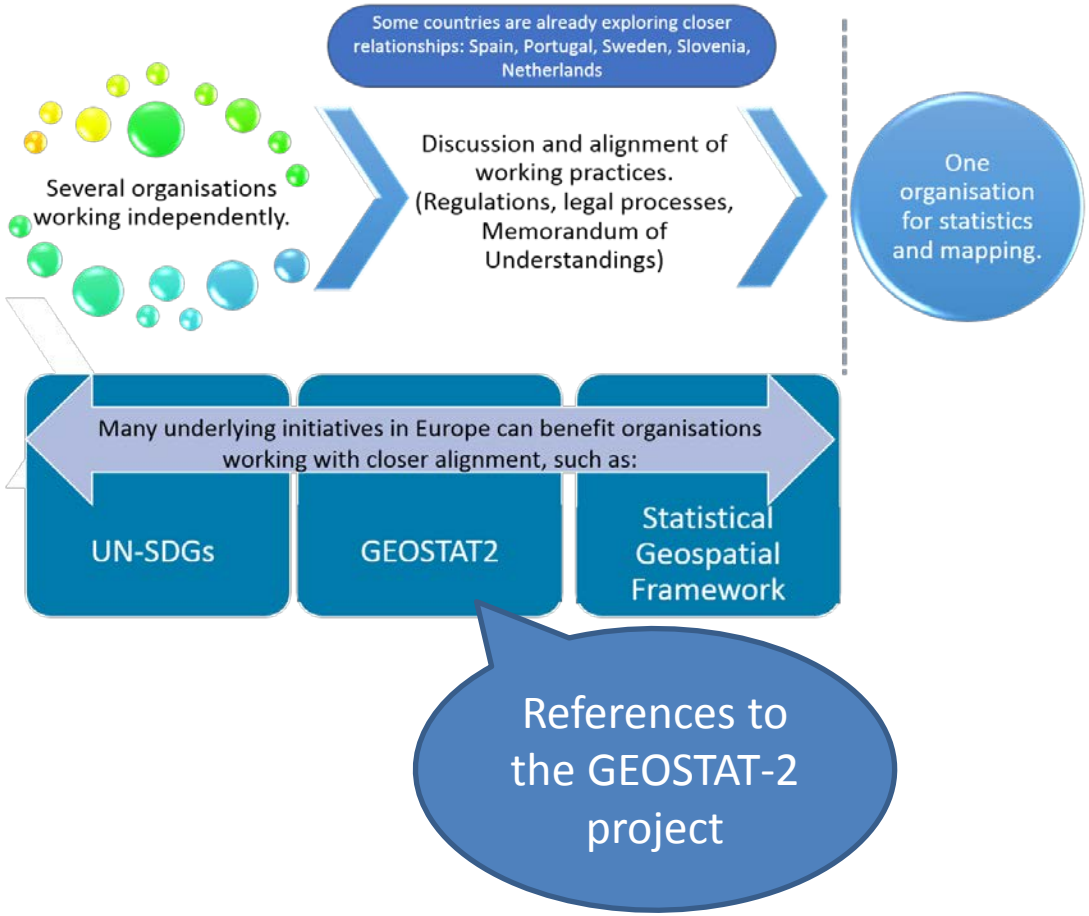
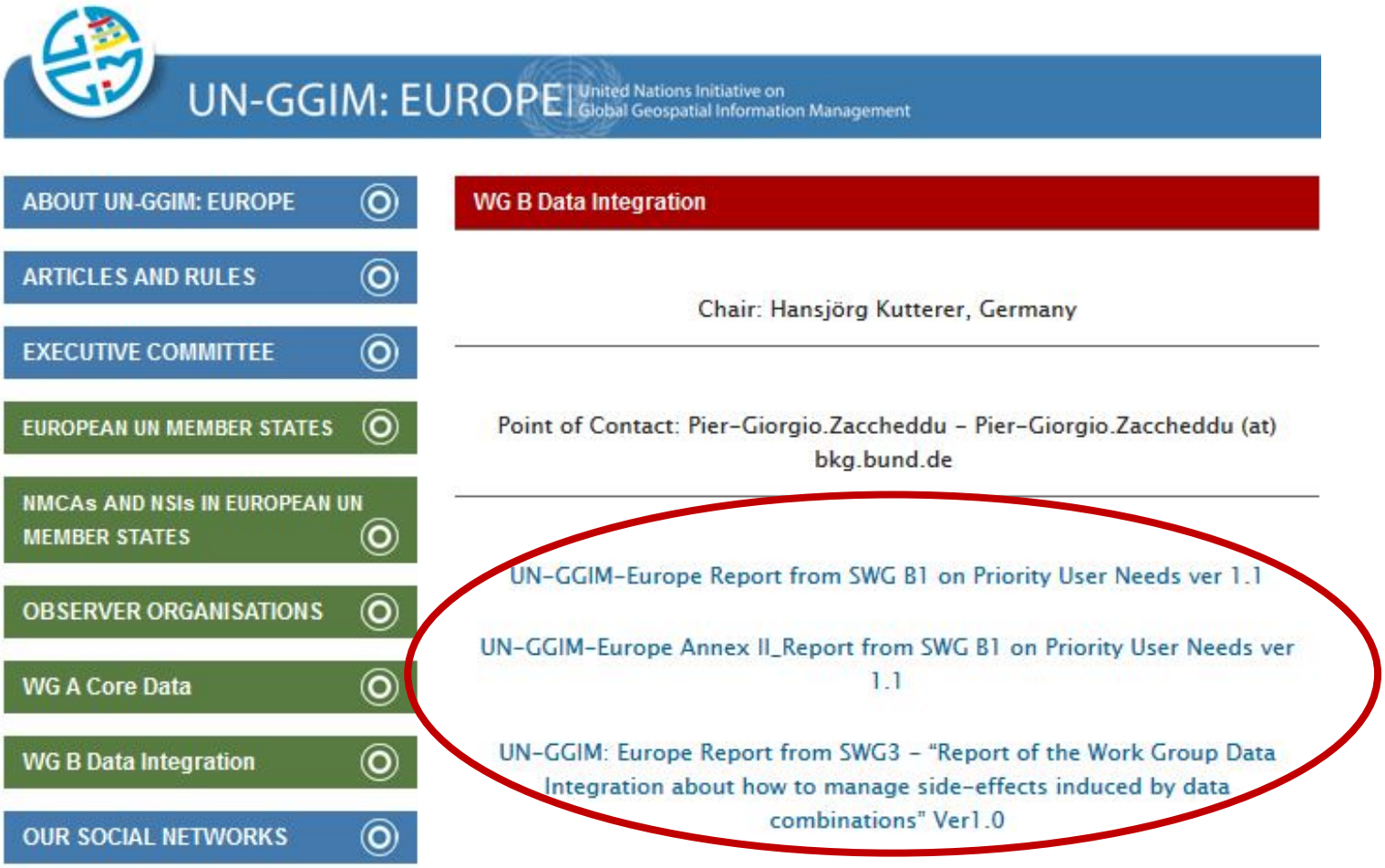


Figure: Proposed Statistical Geospatial Framework

UN-GGIM: Europe – Deliverable B2.2/2.3



Further information about UN-GGIM: Europe WG „Data Integration“ – Website



http://un-ggim-europe.org/content/wg-b-data-integration

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Work Group B: Data Integration

1. Definition of the priority user needs for data combinations (*accomplished*)
2. Recommendation for implementing prioritized combinations of data (*accomplished*)
3. → **Follow-up work plan 2017 – 2020:** *"As a European contribution to the global process on developing a framework for monitoring UN SDG indicators, UN-GGIM: Europe will through the WG on "Data Integration", ensure a two-way interaction with the IAEG-SDG Working Group on Geospatial Information."*

Supportve tasks for the UN-GGIM:Europe WG Data Integration

global

Inter-Agency and Expert Group on Sustainable Development Goal Indicators (IAEG SDGs)

- provide a proposal of a global indicator framework (and associated global and universal indicators)”

IAEG SDGs Working Group on „Geographic Information“ (IAEG SDG WG GI)

- advance the understanding and the role of geospatial information in contributing to the indicator framework

regional

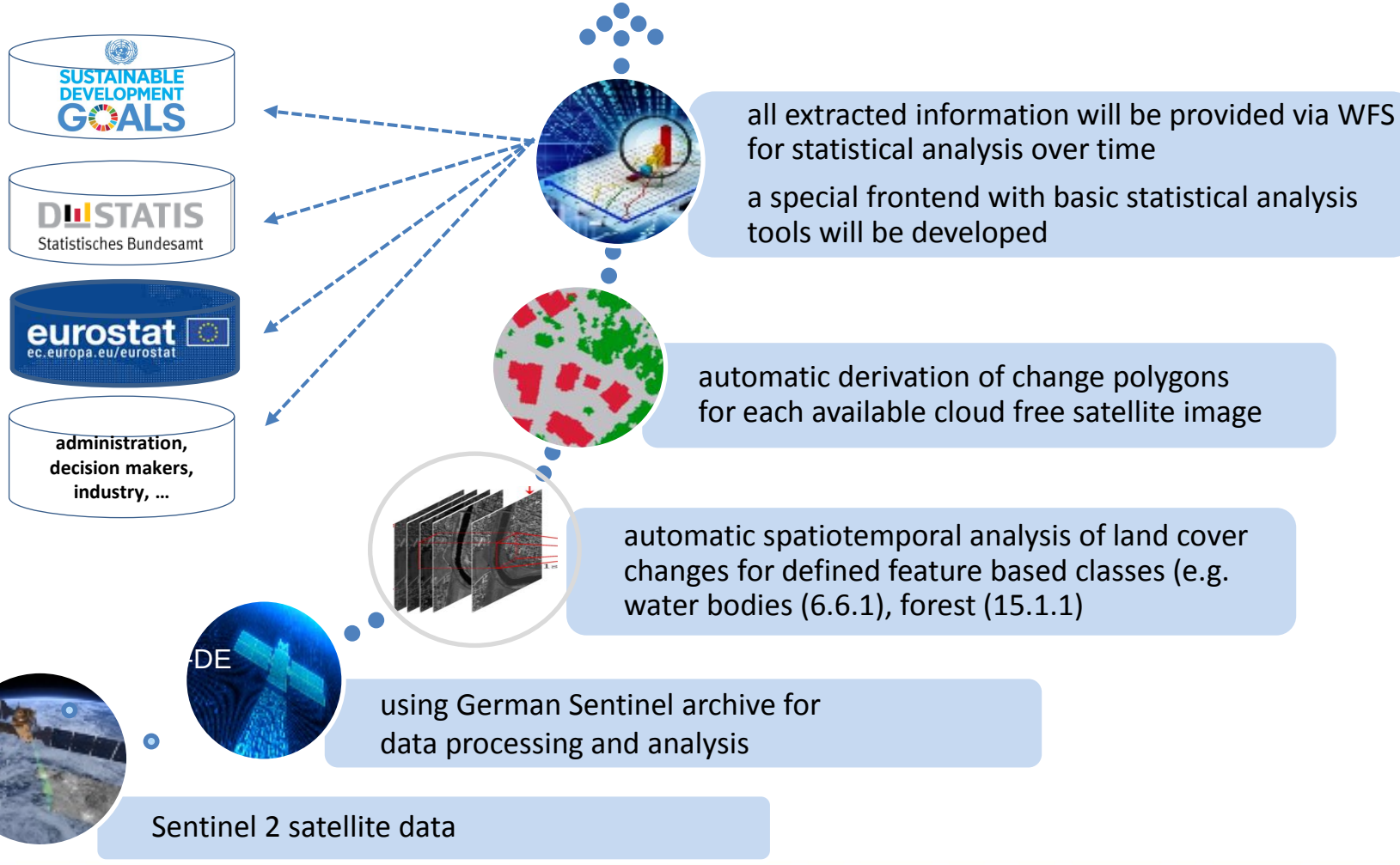
UN-GGIM:Europe Work Group „Data Integration“

- Contribute to the global process and ensure a two-way-interaction with the IAEG SDG WG GI

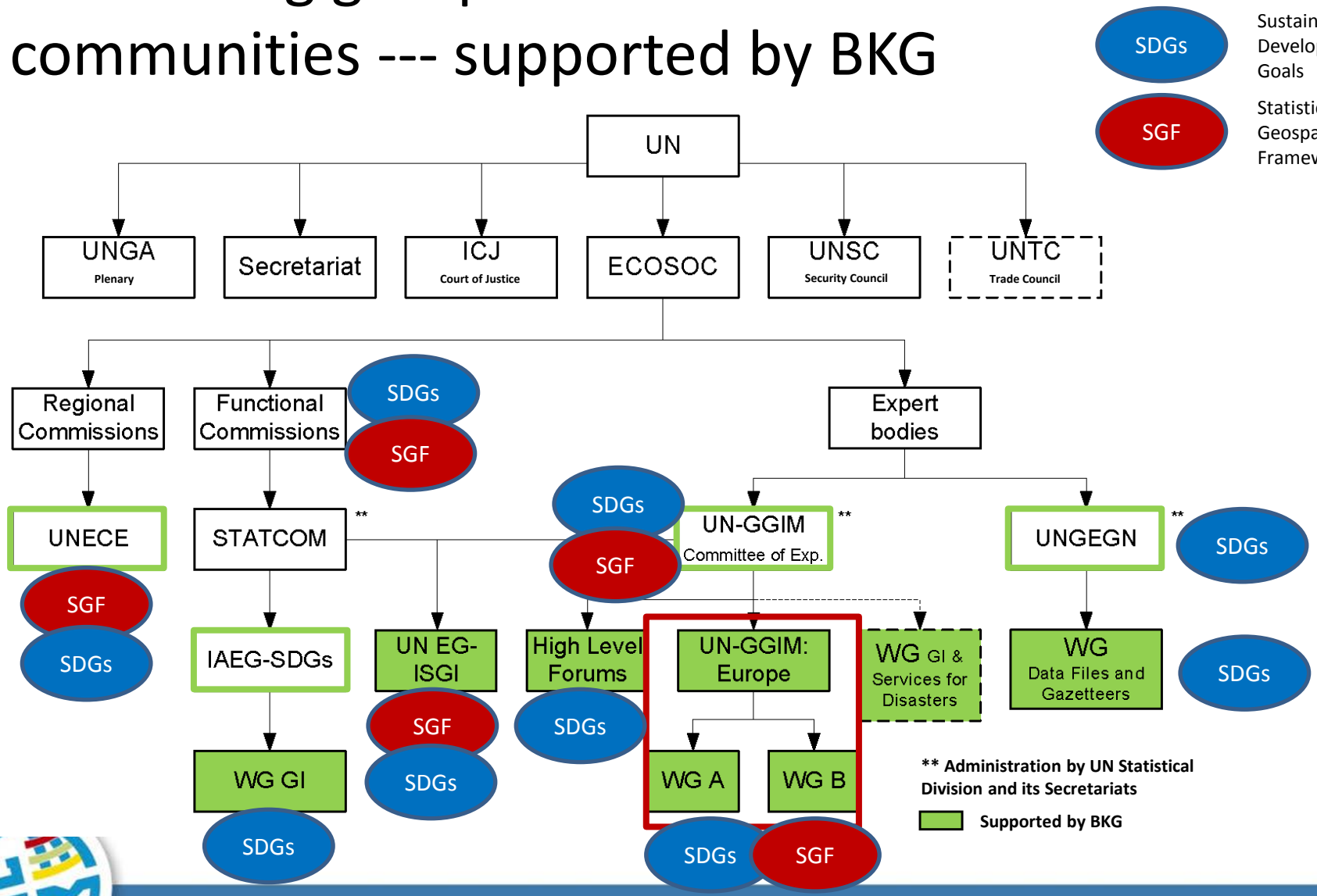
Specific tasks for the UN-GGIM:Europe WG Data Integration

- Develop practical examples (best practice) on specific national implementations on how Geospatial Information can support in processes in achieving the SDGs and where the need shows to measure, monitor and mitigate challenges
- suggest links between communities: demographic, statistical and environmental data together with the Geospatial Location – ranging from the conceptual level to specific indicators.

Best-practice example: Land Cover Change Detection Service (LaVerDi) @ BKG



Connecting geospatial and statistical communities --- supported by BKG



Expectations and benefits from GEOSTAT-3

- The GEOSTAT-3 action aims to
  1. *Develop a European version of the SGF (ESS-SGF)*
     […]
  3. *Test usefulness of the ESS-SGF and its implementation on selected indicators for the UN SDGs*
     […]
  7. *Better involve NMCAs or other geospatial stakeholders in charge of geocoded registers and administrative data into the EFGS*
  8. *Contribute to the work on the integration of statistics and geospatial information in the framework of UN-GGIM*

Expectations and benefits from GEOSTAT-3

- The GEOSTAT-3 action aims to
  1. *Develop a European version of the SGF (ESS-SGF)*
     […]

     Input BKG:

     - *Support the proof of consistency to principles of the European SGF and INSPIRE*
     - *In the current SFG document no clear reference to (geo-)methods and standards has been included yet.*
     - *The current draft builds on case studies of well implemented national frameworks, rather than being a generic model framework*
     - *To be able to integrate between the two worlds, high level terms which are more generic than the current wording of the five principles in the SGF could be agreed*
       e.g. using the basic elements in geospatial infrastructures (like for INSPIRE in Europe): 1) Standards, 2) Policies, 3) Data, 4) Methodologies, and 5) Services

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- The GEOSTAT-3 action aims to

  […]

  3. *Test usefulness of the ESS-SGF and its implementation on selected indicators for the UN SDGs*
     […]
  7. *Better involve NMCAs or other geospatial stakeholders in charge of geocoded registers and administrative data into the EFGS*

     Input BKG

     - *Share BKG's project experiences, e.g. investigating specific SDG indicators that can be geospatially enabled and disaggregated using Copernicus data and services.*
  8. *Contribute to the work on the integration of statistics and geospatial information in the framework of UN-GGIM*

     Input BKG

     - *Provide the network of the UN-GGIM: Europe WG on Data Integration*

Thank you for your kind attention!

Contact: UN-GGIM: Europe, WG B „Data Integration“:
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