Work Group B “Data Integration“

Item 4b

ExCom Meeting on 01 June 2016 in Frankfurt am Main

UN-GGIM: EUROPE

UNITED NATIONS INITIATIVE ON GLOBAL GEOSPATIAL INFORMATION MANAGEMENT

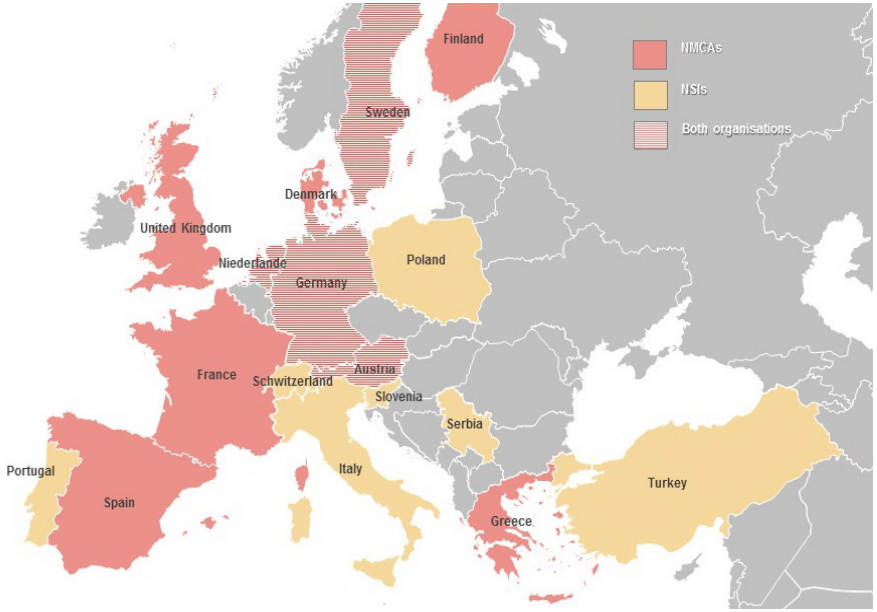
Activities of WG B from Feb‘16 to Jun‘16

- **Progress / activities of WG B**
  - ★ **WG B Meetings on 09 Mar’ and 17-18 May 2016**
  - ★ **Telcos for B2 and B3 in Mar’, Apr’ and May 2016**
  - ★ **Draft deliverables for B2 and B3 --- in progress…**
    → gantt charts for B2 and B3 (attachments-2 and -3)
  - ★ **Involvement of WG B into the discussion of the “geo dimension” in the UN SDG indicators**
    - ★ **Support of DK (Task Team UN-GGIM) contributing to the UN IAEG**
    - ★ **UN IAEG will establish a sub working group, not happened yet**
- **Development of the “Follow-up work plan” for WG B after mid-2016**
  - ★ **Draft by WG B → *“20160525_UN-GGIM-Europe_WG-B_Proposal_Follow-up_Workplan” (attachment-1)***

WG B members – 17 countries, 20 organizations

Solid and active network, but…

- **Problems of WG B members from East European countries to attend physical meetings**
  - ★ **Financial support by EU Commission funds?**
- **Necessity to recruit more colleagues from East Europe, other domains,…**
  - ★ **Evaluate replies of the questionnaires compiled by the global UN-GGIM WG NIA?**



Tasks B2: “methods”

2. **Recommendation for methods implementing the prioritised combinations of data (Mid-2016)**

- **review** current European interoperability **frameworks** and geospatial, statistical and other thematic data integration **projects** regarding methods for combinations of data;
- **provide best practise guidance for the interaction** between NMCAs, NSIs, environment agencies and other relevant organisations;
- **review current use of data from multiple sources** (crowd sourcing, community sourcing and regulatory geospatial representations) to identify case studies and best practices relevant for combinations with core data;

- **Subgroup B2 leader: United Kingdom (UK)**

Tasks B2: “methods” – Interoperability Frameworks

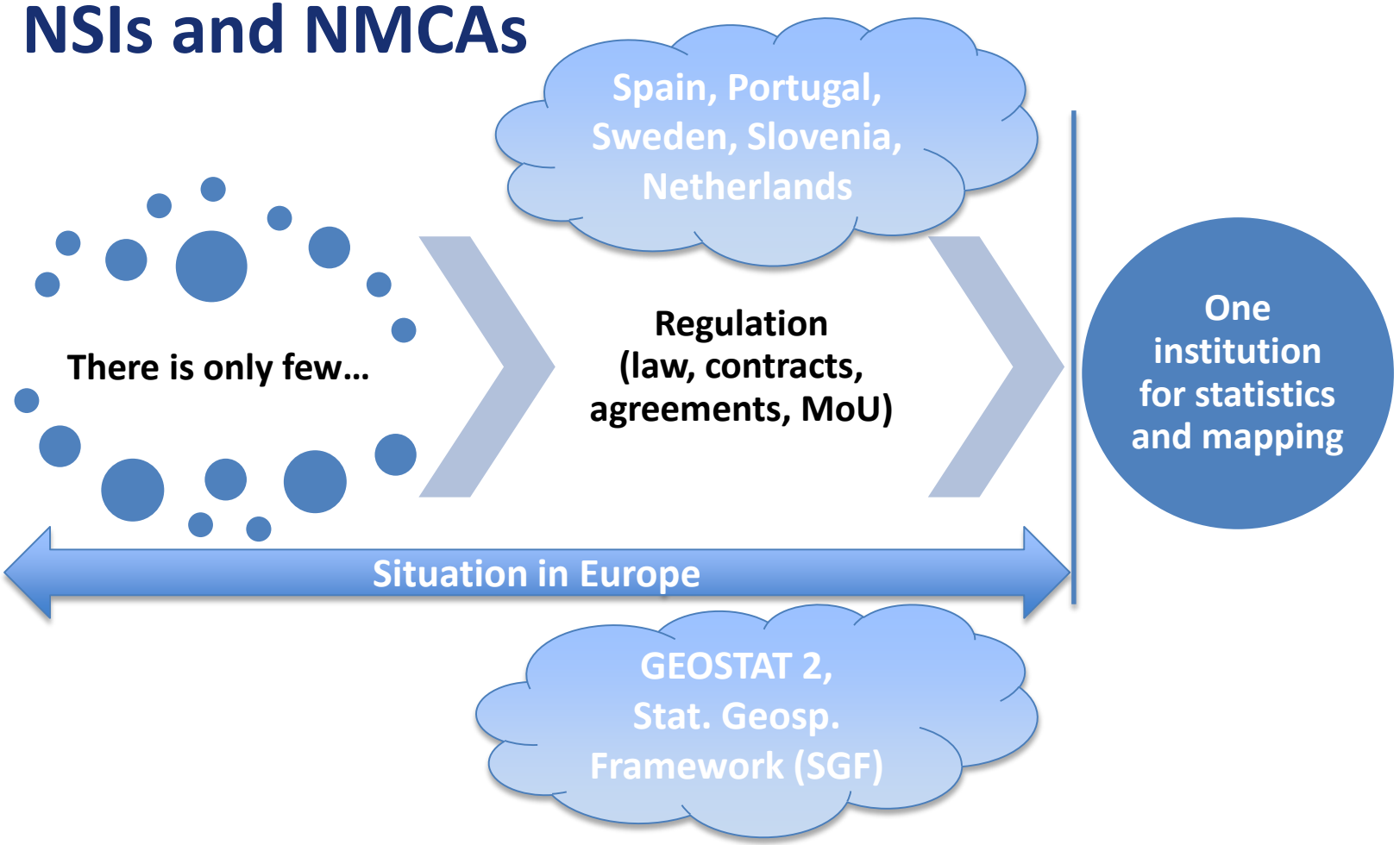
- There is a large amount of preexisting technical interoperability frameworks across Europe and very little well established European policy and semantic interoperability examples.
- Definitions of two types of interoperability for the study are:
    1. Semantic Interoperability
    2. Policy Interoperability
- Local and European wide examples will be compared

Tasks B2: “methods” – Interoperability Frameworks

Table 1 Testing frameworks against the workgroup B2 criteria			Criteria					
			Single orgnisation	Multiple organisations	Cross legal boundaries	Multiple data types (spatial / stats)	open data	Paid data
Frameworks	Europe Wide	INSPIRE		Y	Y	Y	Y	Y
		EULF		Y	Y	Y	Y	Y
		ELF		Y	Y	Y	Y	Y
		Copernicus						
		ECOMET						
		OneGeology						
	Local	Lombardy - SDI		Y			Y	Y
		Norway digital		Y		Y		Y
		KMS		Y		Y		Y
		FUAGIS		Y		Y		Y
		FMI / Länder		Y				

To be finalised soon and provided as a separate document

Tasks B2: “methods” – Interaction between NSIs and NMCAs



→ examples from PT, ES, SE, TR, DE and NL

Tasks B2: “methods” - multiple sources

Review of the current use of data from multiple sources

- **identify case studies and best practices relevant for data combinations (particularly with core data)**
- **Further examples to be considered, amongst others, from GISCO, e.g. Session 1 – Merging statistics and geospatial information**

Item	**Providing addresses and statistical reference areas for geocoding, using the framework of the European SDI**	Udo MAACK, KOSIS, DE
Item	**Mobile data in official statistics**	Igor KUZMA, Statistics Slovenia
Item	**The advantages of using Linked Data to build statistics**	Ian COADY, ONS, UK

Task B3: “side-effects”

3. **Recommendation about how to manage side-effects induced by data combinations (Mid-2016)**

- **recommend effective methods** of governance, quality management, data interoperability, access control and privacy safeguards **for the integration of data from multiple sources with core data**;
- **identify legal and other barriers** for the integration of data from relevant sources.

- **Subgroup B3 leader: Austria (AT)**

Tasks B3: “side-effects” – clarification

- What is a “side effect”?
  - ★ “[...] is something desired or/and undesired that occurs after the data combination and needs further effort to be removed, exploited or steered... maximize the positive effects and minimize the negative […]”
- Side effect classification
  - ★ using the aspects of (interoperability) frameworks
- Collection of side effect examples (description)
  - ★ side effects in existing B1 examples and other Member States examples
- How do side effects influence interoperability and usability?

→ We received contributions from SE, DE, FI, PL, RS, ES

Tasks B3: “side-effects” – examples

a) Matching statistics with administrative boundaries

Mecklenburg-Western Pomerania:

12 Administrative districts
6 Towns not attached to an administrative district

Administrative reform

04.09.2011

6 Administrative districts
2 Towns not attached to an administrative district

31.12.2010

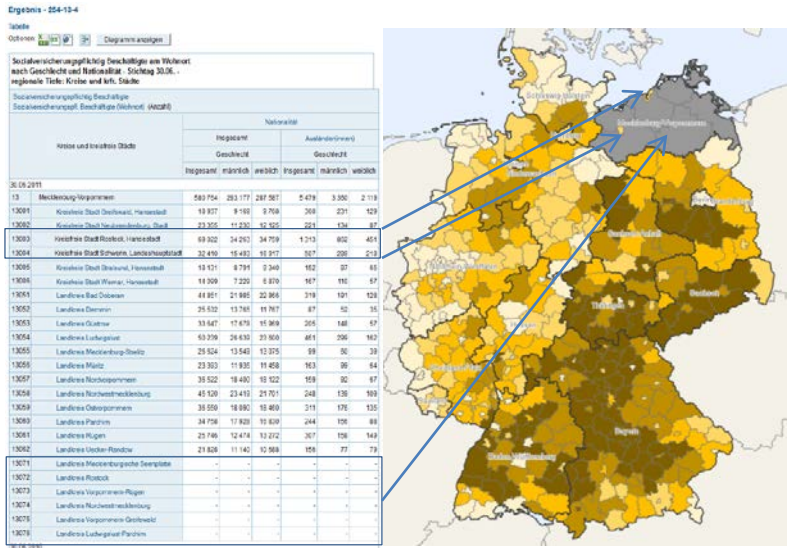
30.06.2011

Population aged 15 – 64 years

Employees subject to social insurance contribution (Place of residence)

Employment rate 2011
(Reference date: 30.06.)

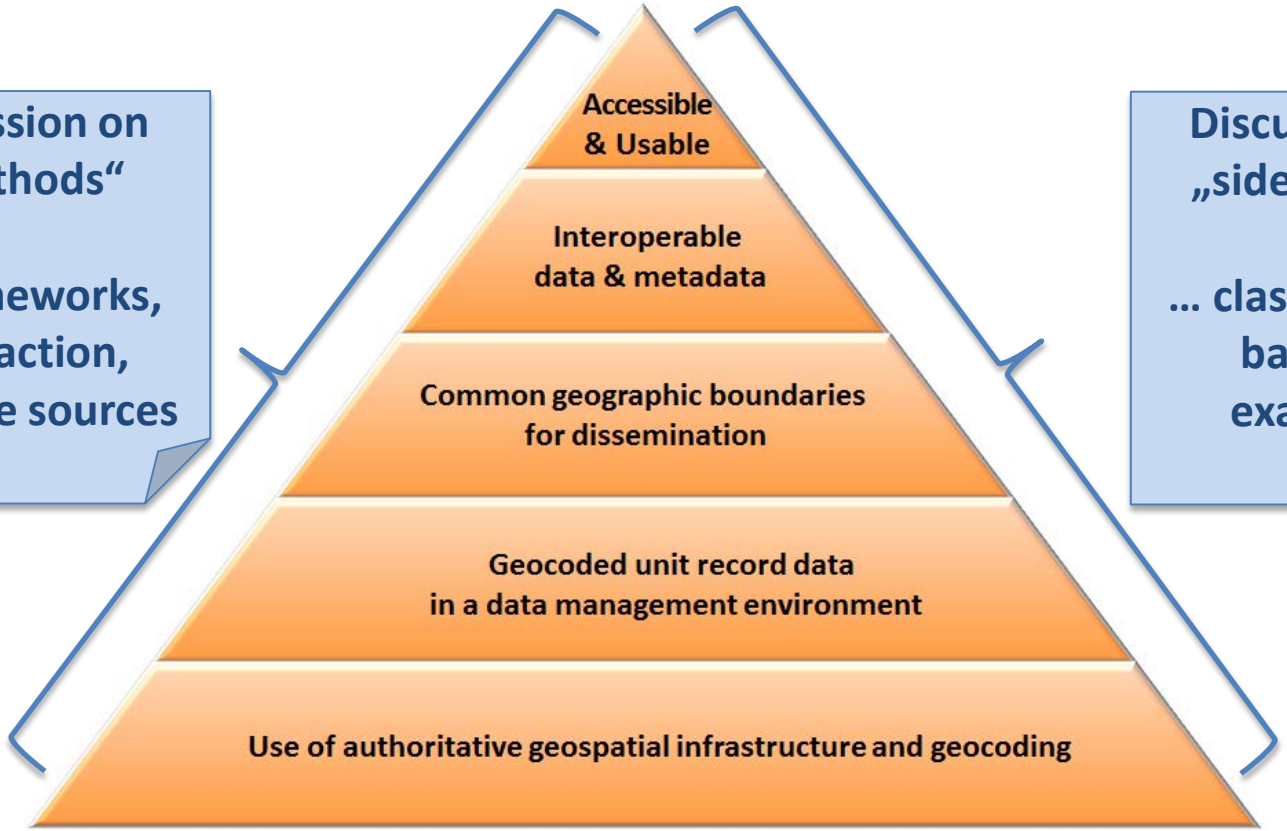
Employment rate 2011



5 principles of the Statistical Geospatial Framework (SGF)

Discussion on „Methods“

… frameworks, interaction, multiple sources



Discussion on „side effects“

… classification, barriers, examples

→ will be considered – where useful – by B2 and B3

→ no consolidated feedback from WG B on the SGF concept

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Follow-up work plan 2016 - 2018

Main prerequisites:

- **Define specific tasks (possibly per year) in order to keep the workload manageable; this is reasonable and could convince other countries to contribute**
- **Define new tasks (possibly) on the basis of the (5) recommendations (from the B1 deliverable, some other tasks based on recommendations from B2 and B3 might be included after the accomplishment of the respective deliverables)**
- **Select not more than 3 specific, the most relevant tasks for the timeframe 10/2016 - 12/2018**

Follow-up work plan 2016 - 2018

Recommendations B1

1. Encourages Member States in Europe to support the development of a European Spatial Data Strategy based on comprehensive National Spatial Data Strategies. Member States are invited to decide on institutional arrangements, including legal arrangements, needed to enable and increase the cooperation between NMCAs and NSIs as well as commercial, scientific and public domains. The data sharing principles of Service-Oriented Architectures (like INSPIRE) should be extended to all European countries. The essence of the National Spatial Data Strategy will be the obligation to directly or indirectly geocode all administrative data records at the unit record level and to use available geospatial information instead of creating own datasets. (Recommendation 1, B1)

Possible task:

Mid-2017

1. **Formulate of a Vision for a European Spatial Data Strategy on behalf of the UN-GGIM: Europe in order to get a strategic vision of the main elements of the strategy, and stakeholders. This should go beyond the objectives formulated for the ELF project. A model might be the ESS Vision 2020. The Spatial Data Strategy should be aligned with the principles of the forthcoming Statistical Geospatial Framework.**

→ Put together a smaller task team to formulate the vision

Follow-up work plan 2016 - 2018

2. Invites Member States to initiate a process to increase the number of national, authoritative geospatial datasets (addresses and others) meeting stakeholders (like statistics) requirements within Member States. This should be incorporated into a geospatial infrastructure maintenance process including its data, services, architectures and business models. The content (data and services) should be accessible to all stakeholders (authorities). The report of the Eurostat task force, on the integration of statistical and geospatial information, states which data that are needed from the NSIs and should be used when deciding which data to give priority. (Recommendation 2, B1)
No task identified
3. Supports Member States to consider requirements from National Statistical Institutes (NSIs) to provide geospatial information covering all the dimensions, including time (timeliness and periodicity), which is very important to follow trends and changes in the environment /SDGs. (Recommendation 3, B1)
Possible task 2: **Mid-2017/end-2017** **Support the definition of the "geo dimension" in the SDGs by engaging in the discussion with information providers responsible for the goals and indicator framework of the SDGs in order to promote the achievement of the goals and the usage of geospatial information for SDG indicators.** **→ elaborated proposal (attachment-1)**

Follow-up work plan 2016 - 2018

4. Encourages Members States to promote the use of geospatial workflows and technology, as a key to advance on the integration of geospatial and thematic (e.g. statistical) information namely supporting initiatives like GEOSTAT 2 that aims to create a model for a point based spatial reference framework (e.g. for statistical production). (Recommendation 4, B1)
No task identified **COMMENT: GEOSTAT 3 merging stats and geo in scope through its focus on designing a SGF for Europe, and using SDG and Census as test beds for the SGF.**
5. Encourages Member States to promote the use of geospatial workflows and technology, in particular for the census 2021. (Recommendation 5, B1)
No task identified

Follow-up work plan 2016 - 2018

Attachment-1

The Working Group on "Data Integration" will:

a) ***Referring to the IAEG-SDG Working Group task 1, review the specifications for the indicators with a European perspective and suggest methodologies, identify needed geospatial data (combinations) and list open issues of the "geo dimension" in the SDGs.***

b) ***Engage in the discussion with information providers responsible for the goals and indicator framework of the SDGs in order to promote 1) the achievement of the goals and 2) the usage of geospatial information for SDG indicators. The recommendations of Working Group A on "Core Data" will be considered.***

c) ***Referring to the IAEG-SDG Working Group task 4, Consider how geospatial information can contribute to the indicator and metadata: 1) as a direct indicator in itself; 2) to support and augment statistical data; 3) to improve the production process of statistical data; 4) to validate national statistical data inputs; 5) to communicate and visualize the geographic dimensions and context of the indicators where appropriate; and 6) to provide granularity and disaggregation of the indicators where appropriate.***

Follow-up work plan 2016 - 2018

[…]

d) With a reference to the IAEG-SDG Working Groups task 5, provide European experiences and best practices in geospatial data production considering relevant quality standards.

e) 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 demographic, statistical and environmental data together with the Geospatial Location – ranging from the conceptual level to specific indicators.

Next steps & Plans for 2016

- **No WG B participation in WG A Workshop on 7-8 Jun‘16**
- **Consolidation period for B2 and B3 reports foreseen for mid-Jun’ to mid-Jul’16**
  - ★ **Provide B2 and B3 items/issues complementary**
  - ★ **WG B decides about report structure for B2 and B3**
- **ExCom Meeting on 1 Jun’16 to decide upon:**

#	Proposals & recommendations
1	Request the ExCom to find financial support for WG members which cannot attend meetings
2	Request the Secretariat to evaluate – if not done already – which European colleagues have replied to the questionnaires compiled by the global UN-GGIM WG NIA.
3	Request the ExCom to make a decision on the proposal 1) for a follow-up work plan for WG B – concerning the Vision for a European Spatial Data Strategy
4	Request the ExCom to make a decision on the proposal 2) for a follow-up work plan for WG B – concerning the definition and development of the “geo dimension” in the UN SDGs
5	Remind the Secretariat to provide a template for the UN-GGIM: Europe deliverables

Thank you for your attention!

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

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