

Report of Work Group B “Data Integration”

**Joint UN-GGIM: Europe – ESS Meeting
11.03.2016**



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Tasks for Work Group B: Data Integration

Supply three deliverables:

1. Definition of the priority user needs for combinations of data (Mid-2015).
2. Recommendation for methods implementing the prioritised combinations of data (Mid-2016)
3. Recommendation about how to manage side-effects induced by data combinations (Mid-2016)

→ Showcase the usefulness of data integration



Tasks B1 – “priority user needs”– accomplished

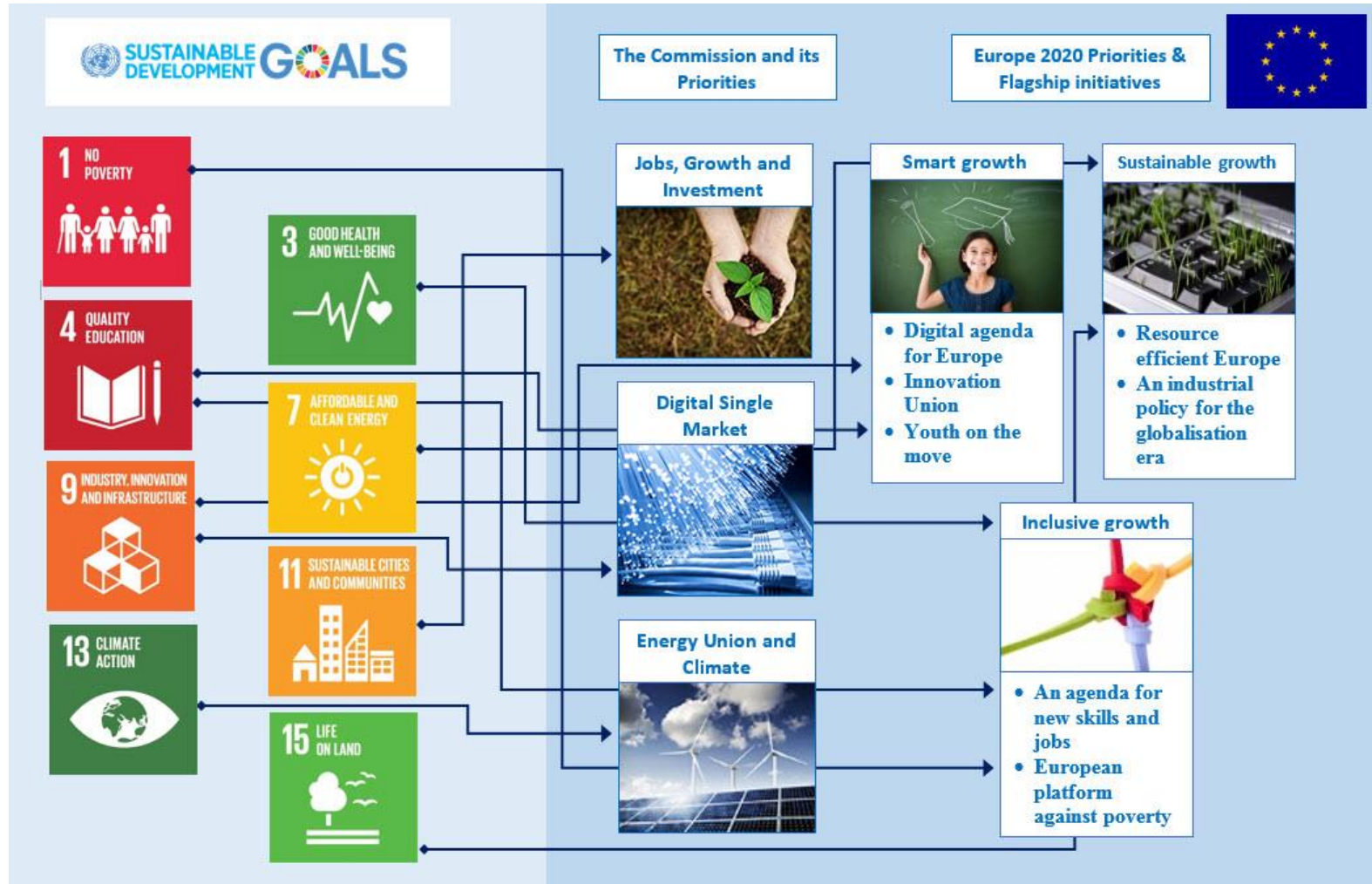
1. Definition of the priority user needs for combinations of data (Mid-2015).

Title: “Definition of priority user needs for combinations of data”

- Subgroup B1 leader: Sweden (SE)
- Collect policy relevant use cases, focus on evidence based decision making
- Elaborate use cases → derive user needs → recommendations
- 40+ Use cases were collected
- 5 Recommendations
- Report adapted to UN SDGs publication in October 2015
- [Report](#) uploaded on the UN-GGIM: Europe website



Tasks B1 – “priority user needs”– accomplished



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Tasks B1 – “priority user needs”– accomplished

How to better meet user needs in Europe?

In a nutshell WG B identified the need for

- ★ A European Spatial Data Strategy building on National Spatial Data Strategies
- ★ Priority data (incl. core data) for a Statistical Geospatial Framework (SGF)
- ★ Improved workflows with geospatial technology

Recommendations & actions:

- ★ What? → Proposed „List of actions“ (incl. objectives)
- ★ Who? → WG B (NSIs and NMCAAs), ExCom, Secretariat, Private sector
- ★ When? → 2016 - 2019



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 NMCA's, 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;
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- **Subgroup B2 leader: United Kingdom (UK)**
 - **activities started in June 2015**



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
- A set of criteria was developed based on the ideals that the WG B held for Europe wide data sharing



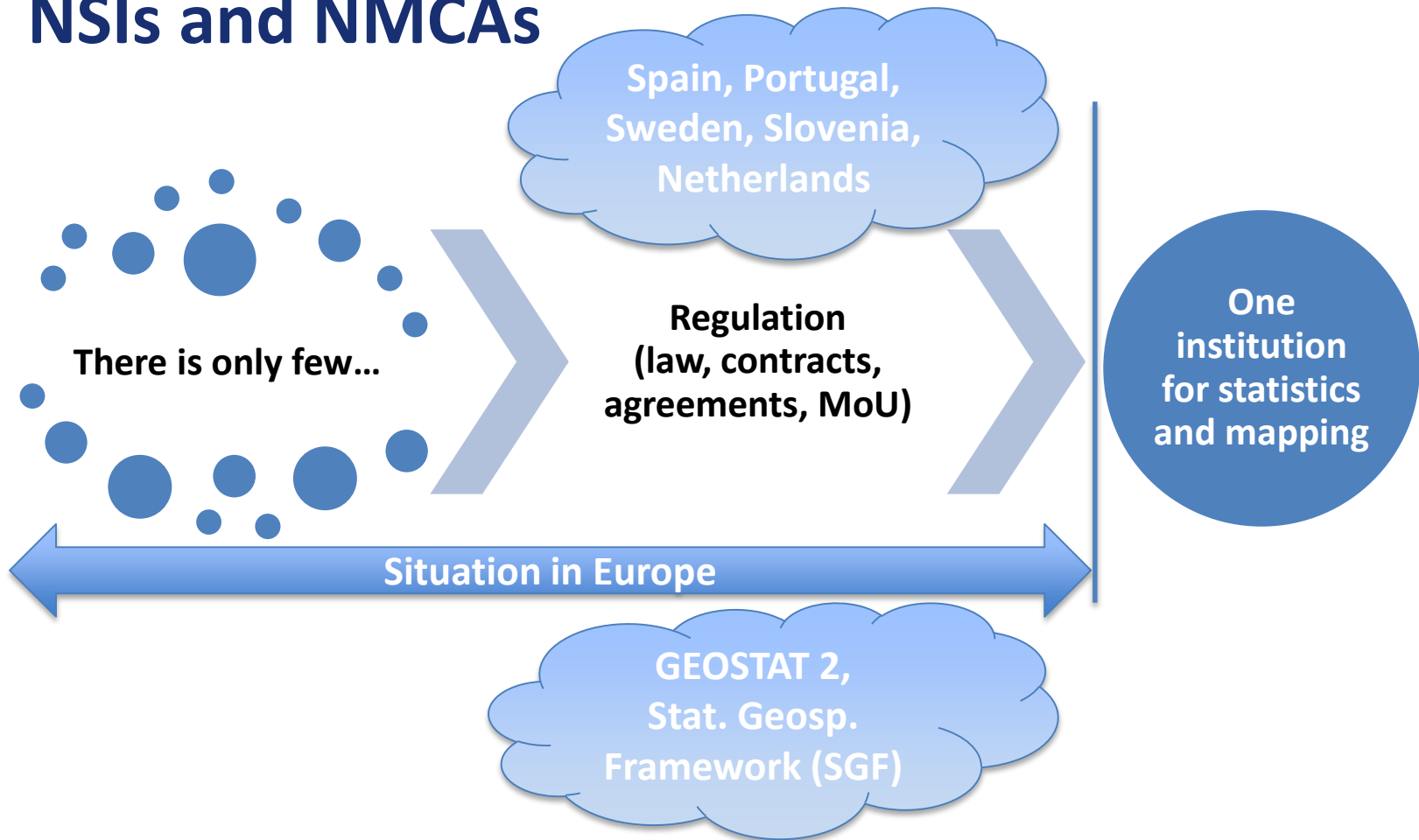
Tasks B2: “methods” – Interoperability Frameworks

Table 1		Criteria					
Testing frameworks against the workgroup B2 criteria		Single organisation	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					
		Norway digital					
		KMS	Y		Y		Y
		FUAGIS	Y		Y		Y
FMI / Länder		Y					

To be updated with further examples:
Geodata Sweden, Data Documentation Initiative (DDI), Generic Statistical Information Model (GSIM), SDMX, DCAT, ...



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



→ „Master Vision“ (recommendation) for organisations to follow



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



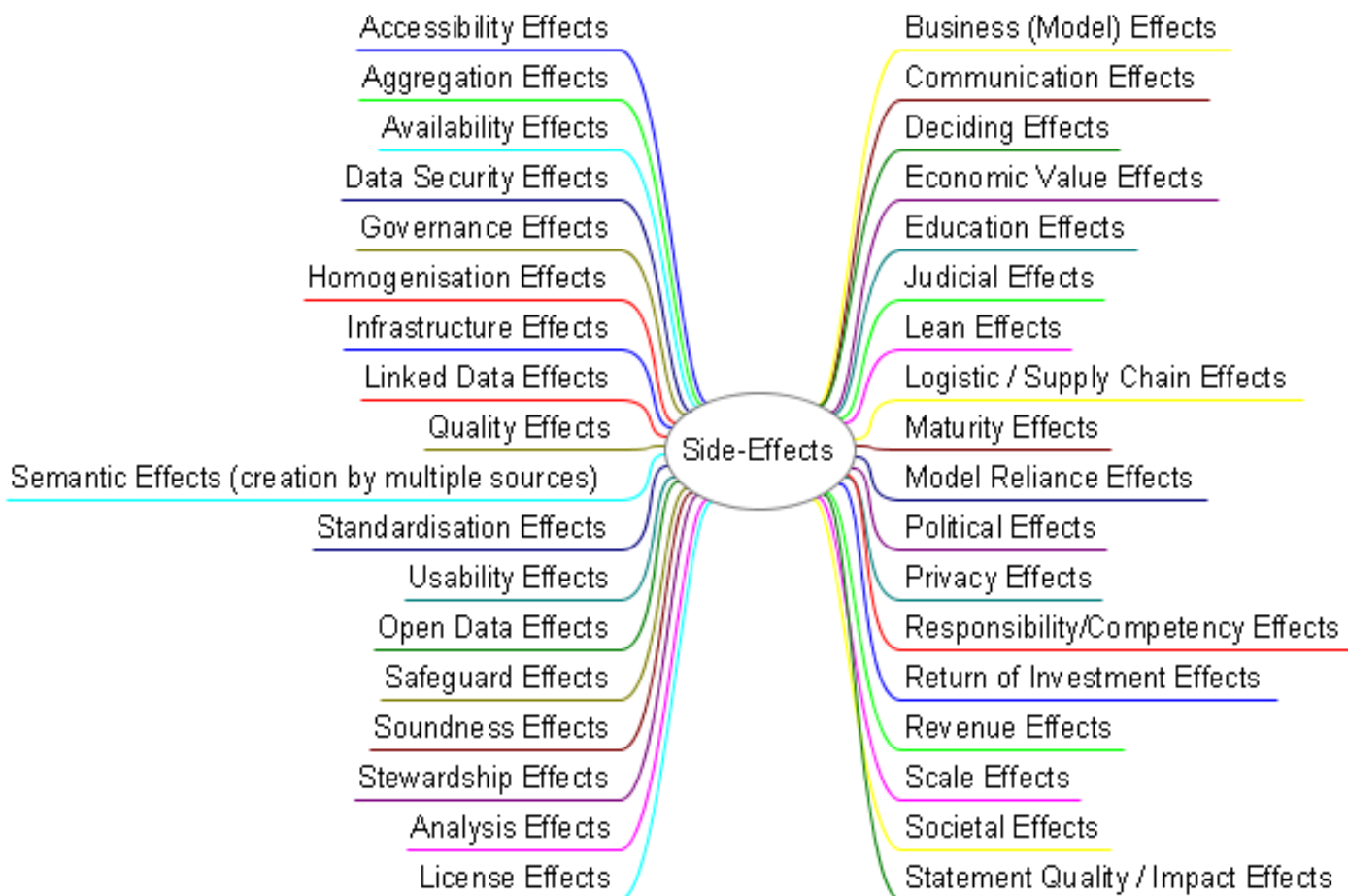
Task B3: “side-effects”

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.
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- **Subgroup B3 leader: Austria (AT)**
 - **activities started in September 2015**



Tasks B3: “side-effects” – clarification



„[...] a first list
of possible
side-effects
[...]“

To be further
evolved and
aggregated!



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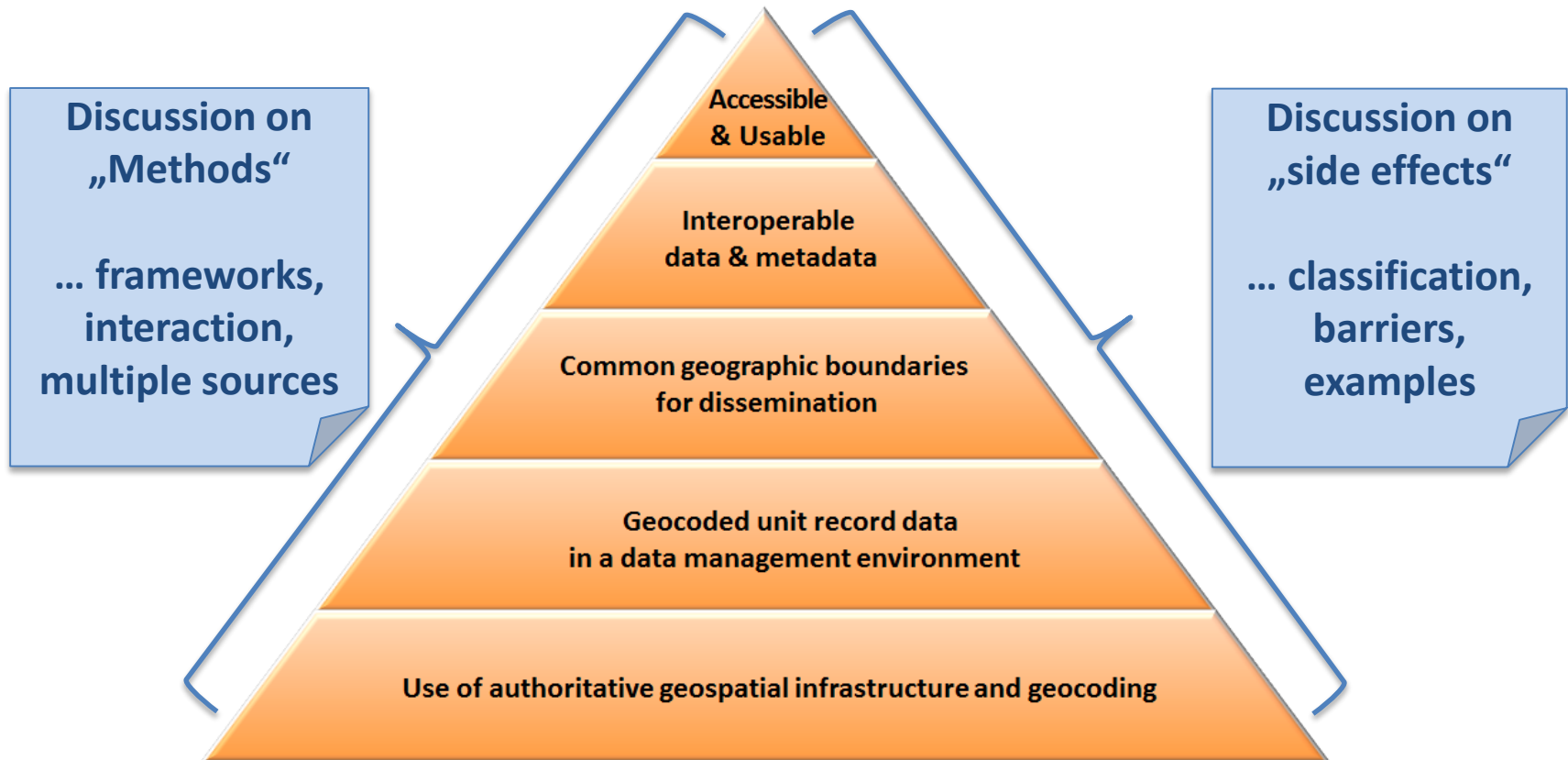


Tasks B3: “side-effects” – clarification

- 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
 - ★ legal, technical, organizational, semantic
- 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?
 - Develop recommendations to manage side effects induced by data combinations



5 principles of the Statistical Geospatial Framework (SGF)



→ will be considered by WG B “Data Integration”



Next steps

- Draft reports for tasks B2 and B3 to be discussed in March/April 2016
- Next physical WG B meeting in May 2016 either in Frankfurt am Main (DE) or at JRC premises in Ispra (IT)
- Communication and collaboration between WG A and B
 - ★ Cross checks with WG A for user requirements & core data definition



Communication



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ARTICLES AND RULES



EXECUTIVE COMMITTEE



EUROPEAN UN MEMBER STATES



NMCAs AND NSIs IN EUROPEAN UN
MEMBER STATES



OBSERVER ORGANISATIONS



WG A Core Data



WG B Data Integration



WG B Data Integration

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UN-GGIM–Europe Report from SWG B1 on Priority User Needs ver 1.1

UN-GGIM–Europe Annex II_Report from SWG B1 on Priority User Needs ver
1.1

<http://un-ggim-europe.org/>



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Thank you for your attention!



There is still a lot of work to do!

Chair: Hansjörg Kutterer, Director General of BKG

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