

### Summary

UN-GGIM: Europe's work plan mainly focuses on two issues: increasing data interoperability and harmonization by proposing core geospatial data and enabling the integration of geospatial data with other information/data (statistical, environmental, etc.) in order to foster further usage.

Work Group B "Data Integration" (WG B) is chaired by Germany and deals with the integration of geospatial data (including cadastral parcels) with other information. It is common understanding in WG B that a global vision with the focus on Europe should be envisaged for all tasks / deliverables. Strategic and political papers for "evidence based decision making" are needed rather than technical ones.

WG B takes into account the global recommendations from UN-GGIM such as of the UN Expert Group on the Integration of Statistical and Geospatial Information as well as of other relevant UN and global initiatives.

Following its work plan WG B will supply three deliverables for three main tasks 1-3:

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

These main tasks consist of associated sub-tasks a) to g). WG B decided to distribute the work to three subgroups B.1, B.2 and B.3, one for each main task. Although the main focus in 2015 has been put on the work of subgroup B.1 the other two subgroups B.2 and B.3 have started their planned work, and are conducting these in parallel.

Several meetings in 2014 / 2015 were used to present the current activities of WG B as well as the draft outline report for task B.1 to a wider audience. There was a great interest in the work of WG B to collect use cases and to show user needs on data combinations.

It should be noted that 15 countries comprising 20 organizations are already committed to WG B. Currently, these organizations are either mapping or statistical ones. There is no representation from other thematic areas as yet. Unfortunately weak responses or commitments and contributions from the Baltic, Balkan and Eastern European countries (except Poland) can be reported.

The purpose to share the work between as many participants as possible is important in order to ensure both that individual contributions accommodate participant's availability, and that the collective work, benefitting from as many contributors as possible, will be able to deliver relevant outcome and findings.

As a result the first deliverable B.1 "Definition of priority user needs for combination of data" of WG B has been necessarily focused on data combinations of geospatial with statistical data. It was submitted to the UN-GGIM: Europe Executive Committee in **July 2015** and after its adoption uploaded to the UN-GGIM website: <http://un-ggim-europe.org/content/wg-b-data-integration>. The deliverables for B.2 and B.3 are both due in **mid-2016**.



### Introduction

The main tasks for Work Group B “Data Integration” (WG B) were summarized in a draft work plan which was presented at the UN-GGIM: Europe inaugural meeting in October 2014 in Chisinau, Moldova. The tasks for WG B were based on the report of the Work Group 2 on “Interoperability and data infrastructures for geospatial information” in the preparatory phase (2013-2014).

The draft work plan was discussed within the kick-off meeting of WG B on 17-18 November 2014 in Frankfurt am Main. The main tasks 1-3 were confirmed. The associated sub-tasks a) to g) were slightly amended. The revised work plan (status: 14 January 2015) summarizes the main tasks for WG B. Following this work plan three deliverables for three main tasks will be supplied by WG B:

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)

WG B is chaired by Germany (Hansjörg Kutterer, Director General of the Federal Agency for Cartography and Geodesy – BKG, assisted by Pier-Giorgio Zaccheddu, actively assuming the responsibility).

WG B decided to distribute the work to three subgroups B.1, B.2 and B.3, one for each main task. The following subgroup leaders were nominated to function as main contact points for the chair:

- Subgroup B.1: Definition of priority user needs for combinations of data, Lead: Sweden (SE), Contact point: Marie Haldorson, Statistics Sweden
- Subgroup B.2: Recommendation for methods implementing the prioritized combinations of data, Lead: United Kingdom (UK), Contact point: Clare Hadley, James Norris, Ordnance Survey
- Subgroup B.3: Recommendation about how to manage side-effects induced by data combinations, Lead: Austria (AT), Contact point: Markus Jobst, BEV Austria

After the kick-off meeting of WG B on 17-18 November 2014 in Frankfurt am Main another (physical) meeting was held on 7-8 May 2015 at the same venue. Furthermore, subgroup B.1 conducted three telephone conferences on 27 January 2015, 18 February 2015 and 17 April 2015 as yet.

WG B takes into account the global recommendations from UN-GGIM such as of the UN Expert Group on the Integration of Statistical and Geospatial Information as well as of other relevant UN and global initiatives.

### 1. Definition of the priority user needs for combinations of data (Subgroup B.1)

The goal for this sub working group B.1 is to deliver a report to the UN-GGIM: Europe Executive Committee by **mid-2015** consisting of a number of use cases showing the priority user needs for combinations of data.

The main focus is to provide use cases and user needs relevant **for policy makers and politicians** and show how evidence based decision making can benefit from geospatial information in combination with other information on the European, national and sub-national level. The report will be kept on a non-technical level reflecting the UN and the European goals (e.g. UN sustainable development goals and EU top 10 political priorities and challenges).

The joint meeting of the Geographical information system of the Commission (GISCO) Working Party and of UN-GGIM: Europe on 2-3 March 2015 at Eurostat premises in Luxembourg was used to present the draft outline report for task B.1 to a wider audience. There was a great interest in the WG B work to collect use cases and to show user needs. The breakout session in the afternoon was successfully used to get feedback from the mapping & statistical community on directions taken. Questions like “Which are the main benefits we need to ‘sell’?” were discussed and suggestions on how to make a strong statement to the policy



# UN-GGIM: EUROPE – WORK GROUP B

## Report 11/2014 – 09/2015 for UN-GGIM: Europe Plenary Session 10/2015

makers were collected. Afterwards the draft outline report has been uploaded on the UN-GGIM: Europe website and opened up for further amendments and comments.

Subgroup B.1 telephone conferences were focused on the elaboration of the draft outline report for task B.1. Recent updates concerned the ‘Europe 2020’ strategy and European challenges. Particularly the latter chapter is to be aligned with the updated strategy of the new European Commission.

The INSPIRE Geospatial World Forum Conference in Lisbon, Portugal, 25-29 May 2015, comprised an UN-GGIM event day on Thursday, 28 May, comprising, amongst others, the UN-GGIM: Europe session. An informal Subgroup B.1 meeting was arranged on Tuesday, 26 May, at the conference venue.

Considering the strategic importance of the objectives of WG B, it should be noted that although 15 countries comprising 20 organizations are already committed to WG B, these organizations are currently either mapping or statistical ones. There is no representation from other thematic domains as yet. Unfortunately weak responses or commitments and contribution from the Baltic, Balkan and Eastern European countries can be reported. As progress and little success it can be stated that at the WG B meeting in May 2015 a representative from the statistical institute of the Republic of Serbia participated for the first time. And, a use case from Albania has been introduced into the draft outline report for B.1.

Countries	NMCAs	NSIs
Austria	BEV	Statistics
Finland	National Land Survey	
France	IGN	
Germany	BKG	Destatis
Greece	National Cadastre & Mapping Agency S.A.	
Italy		GIS unit
Netherland	Dutch Kadaster	Statistics
Portugal		Statistics Portugal (INE)
Poland	Polish CSO / NMA	Central Statistical Office
Spain	CNIG, SDGC	
Sweden	Lantmäteriet	Statistics
Turkey	TKGM	Turkish Statistical Institute
United Kingdom	Ordnance Survey	
Republic of Serbia		Statistics Serbia
Denmark	DGA	
Switzerland		NSI

Figure: country representation in WG B (status: May 2015)

Anyway, the purpose to share the work between as many participants as possible is important in order to ensure both that individual contributions accommodate participant's availability, and that the collective work, benefitting from as many contributors as possible, will be able to deliver relevant outcome and findings.

As a result the first deliverable “Definition of priority user needs for combination of data” (**July 2015**) of WG B was necessarily focused on data combinations of geospatial with statistical data. Immediately after the adoption of the deliverable by the UN-GGIM: Europe Executive Committee it was uploaded to the UN-GGIM website: <http://un-ggim-europe.org/content/wg-b-data-integration>



### 2. Recommendation for methods implementing the prioritised combinations of data (Subgroup B.2)

Subgroup B.2 will look at recommendations for methods for implementing the prioritized combinations of data. It will complete its work by **mid-2016**. The aim of the working group is to seek a universal approach to achieving interoperability between statistical and geospatial data across Europe.

It is expected that the working group will prepare a report for UN-GGIM: Europe which will identify successful interoperable frameworks and suggest areas where previous frameworks have not been successful. Due to the current composition of the working group, the initial scope of work will concentrate on geospatial and statistical data integration projects.

Task B.2.1 focuses on reviewing current interoperability frameworks. There have been many different approaches to defining interoperability frameworks across Europe over a long timeframe. The working group has decided to review frameworks which are currently in operation, and to score them against a defined set of criteria to identify which of the frameworks are providing business benefits to the users, and which can be improved. The work group has agreed that data interoperability can be classified into three broad areas: Technical interoperability; Semantic interoperability; and, Policy interoperability. These will be taken into account whilst reviewing the interoperability frameworks. The work group has defined the criteria to be used in reviewing the frameworks and, following a request to UN-GGIM: Europe Member States has received several suggestions of frameworks to review.

Task B.2.2 is focused on providing best practice guidance for interactions between international organisations. Work group members will be asked to provide examples, from their own country of how organisations interact with each other, either through formal agreements, or informal working practices. Each example will take into account the successes and benefits of using interoperability or, where attempting to merge data or working practices have caused issues or constraints. This will lead into Task B.2.3, but with a wider remit to include the use of VGI data and crowd sourced data. There is an opportunity to produce document outlining how best practice has been put into place, and to produce a “master vision” for other organisations to follow.

The proposed outputs from WG B.2 are very closely linked to the UN-GGIM Knowledge Base and could be presented as documents for inclusion.

WG B have held a number of teleconferences, the first on 18 June 2015, during the teleconference, the work group agreed the proposed outline and structure of the tasks. Following on from the teleconference, an updated timeline, and a proposal for action were provided to the Chair of Work Group B.

### 3. Recommendation about how to manage side-effects induced by data combinations (Subgroup B.3)

The subgroup B.3 will deal with recommendations about how to manage side-effects induced by data combinations. Its work will be completed by **mid-2016**.

Side effects induced by data combinations may result in unavailability, non-usability, misinterpretation and misuse of data and their providing services. Three aspects concerning data interoperability, stewardship and governance allow for sustainable access, ongoing maintenance and use of geo-information.

Proposed B.3 milestones comprise, amongst others, the collection of the state-of-the-art for data interoperability (barriers of use, privacy safeguards, access and multi-sourced data quality), geospatial



# UN-GGIM: EUROPE – WORK GROUP B

## Report 11/2014 – 09/2015 for UN-GGIM: Europe Plenary Session 10/2015

---

stewardship experiences and spatial data infrastructure governance by observation, questionnaire and literature review.

Three main tasks/questions will be considered in subgroup B.3:

Task B.3.1 focuses on the identification of side effects. What kind of side-effects may occur with data combinations? Can these side effects be categorized and how? The identification and categorization of side effects induced by data combinations will accordingly help to evaluate its impact and risk on (spatial) geo information management.

Task B.3.2 follows the pragmatic dimension of interoperability: how side effects influence interoperability and usability? All effort and governance to enhance technical-, semantic- and policy interoperability (subgroup B.2.1) bases on its pragmatic perspective: it is useful for a variety of stakeholders and therefore helps to follow UN sustainable development goals. This task describes the impact of side effects induced by data combinations on the usability of the outcome.

Task B.3.3 will look at the reduction, manipulation and steering of side effects. Is there a role for stewardship? Are any other agreements useful to govern side effects on an international level? This task enhances governance methodology for dealing with side effects in multi-sourced spatial data (data combinations) and applications.

In November 2015 the European Forum for Geography and Statistics (EFGS) Conference is to be held in Vienna, Austria ([www.statistik.at/efgs2015](http://www.statistik.at/efgs2015)). It will be hosted by Statistics Austria with the support from Eurostat and in co-operation with the Austrian Federal Office of Metrology and Surveying (BEV). In addition, BEV is also with the International Cartographic Association (ICA) Symposium on European Cartography (<http://eurocarto.org/>). This is an event in the scope of the ongoing International Year of the Map. Both events will take place at the same dates from 10-12 November 2015 and are likely endorsed and substantially supported by UN GGIM (global) as well as by UN-GGIM: Europe and its WG A and B.

The next physical WG B Meeting will be arranged on the occasion of the aforementioned events in Vienna on 9 November 2015 at BEV premises.

