

Joint UNECE / Eurostat / UN-GGIM: Europe Workshop on Integrating Statistical and Geospatial Information

4-5 October 2023, Belgrade, Serbia

REPORT OF THE WORKSHOP

1. The first Joint UNECE / Eurostat / UN-GGIM: Europe Workshop on Integrating Statistical and Geospatial Data was held in the House of the National Assembly in Belgrade, Serbia, from 4 to 5 October 2023. It was attended by 74 participants from Albania, Armenia, Austria, Belgium, Bosnia and Herzegovina, Finland, France, Georgia, Germany, Ireland, Italy, Kazakhstan, Kyrgyzstan, Malta, Netherlands (Kingdom of the), North Macedonia, Norway, Poland, Portugal, Republic of Moldova, Republic of Serbia, Slovakia, Slovenia, Sweden, Switzerland, Ukraine, United Kingdom, the United States of America, EuroGeographics, Eurostat, Organisation for Economic Cooperation and Development (OECD), UN-GGIM: Europe, United Nations Economic Commission for Europe (UNECE), United Nations High Commissioner for Refugees (UNHCR), the World Bank Group, and other private sector organisations.

2. The workshop was organised by UNECE in collaboration with Eurostat, UN-GGIM: Europe and the workshop host organisation, the Republic Geodetic Authority of the Republic of Serbia. The Joint Workshop Organising Committee consisted of Taeke Gjaltema (UNECE), Sara Stewart (UNECE), Márta Nagy-Rothengass (Eurostat), Bianka Fohgrub (Eurostat), Cristian Fetie (Eurostat), Tomaž Petek (UN-GGIM: Europe), Carol Agius (UN-GGIM: Europe), David Henderson (UN-GGIM: Europe), Francisco Valla (UN-GGIM: Europe), James Norris (UN-GGIM: Europe), Pier-Giorgio Zaccheddu (UN-GGIM: Europe) and Darko Vucetic (Republic Geodetic Authority).

3. The workshop was developed as part of an EU-funded project, granted to UNECE under European Union Contribution Agreement 2021.0180, which aims to develop greater capacity in the integration of geospatial and statistical data across the UNECE region by fostering stronger links between the two communities, supporting greater collaboration, and encouraging greater data integration through the promotion of stronger institutional partnerships and the use of common standards.

4. The workshop was designed to focus on the sharing of innovative and best practices, as well as lessons learned, on the integration of statistical and geospatial data at both national and international levels. The workshop sessions focused on specific areas that were identified through the UNECE Survey and were designed to cluster around three main themes which naturally aligned with the strategic pathways of the UN Integrated Geospatial Information Framework:

- **Effective Governance:** This theme focused on the roles and remits of the main international and regional bodies and how they work together on data integration, as well as high-level overviews of key policy frameworks relating to data integration, and their adoption at national levels.
- **Data and Technology:** This theme focused on best practices and innovation within the data lifecycle – from collection, management, analysis, visualisation to dissemination, and standards for data harmonisation and interoperability. Due to the popularity of this theme during the submission of

abstracts, this session was divided into two successive sub-sessions, the first focusing on design, production and analysis, and the second on visualisation, dissemination and web technologies.

- People and Partnerships: This theme focused on resources for training and support for capacity development and examples of successful national collaboration.

5. The workshop was formally opened by Mr Borko Drašković (Director of the Republic Geodetic Authority), Dr Miladin Kovačević (Director of the Statistical Office of the Republic of Serbia), Taeke Gjaltema (Workshop Secretariat and Regional Advisor for Statistics at UNECE), Márta Nagy-Rothengass (Deputy Director of Sectoral and Regional Statistics and Head of the Regional Statistics and Geographical Information Unit at Eurostat), and Tomaž Petek (Chair of UN-GGIM: Europe and General Manager of the Surveying and Mapping Authority of the Republic of Slovenia). A written statement from the President of the National Assembly of the Republic of Serbia was also shared with participants.

6. In total, 23 presentations were given across the three sessions. Over the course of the workshop, three interactive activities were also organised in the form of small group discussions to help stimulate dialogue and collaboration amongst participants in order to generate ideas and new ways of thinking on specific topics relating to the workshop sessions. There were also ample opportunities for networking and discussion during the workshop breaks as a further means of fostering stronger links between the participants. The workshop was concluded with closing remarks on the future challenges and opportunities in the field of integrating statistical and geospatial information from the workshop chairs who consisted of Taeke Gjaltema (UNECE), James Norris (UN-GGIM: Europe), Carol Agius (UN-GGIM: Europe) and Márta Nagy-Rothengass (Eurostat).

7. During the interactive activities, small group discussion focused on how to optimise current governance and policy frameworks, identify the skills needed to progress data integration activities, determine the best ways to communicate and engage with key stakeholders in the field, and identify the key building blocks needed to form successful and sustainable partnerships both now and into the future. Key discussion points included:

- The bigger policy frameworks and initiatives (e.g. 2030 Agenda, The European Green Deal, Global Statistical Geospatial Framework, Integrated Geospatial Information Framework) should be used as the driving force for data integration, with cooperation key to implementing such policies properly and fully.
- There are still a number of wider governance and technical issues (e.g. data duplication, licensing issues, privacy concerns, legal aspects) that need to be overcome before such policies can be fully implemented. A user-centric approach to policy development and enablement may be helpful.
- Participants noted a particular lack of skills in IT, programming/development, and data quality which were recognised as important to data integration activities.
- Effective communication, collaboration and marketing skills were identified as key to acquiring buy-in from senior management by presenting the value and impact of data integration, and establishing new multi-disciplinary and multi-stakeholder lines of work.
- The need for inter-disciplinary teams was recognised as important as a range of specialists from the statistical, geospatial and IT sectors are needed to effectively integrate data. Data scientists may be a bridge between the disciplines.
- Barriers to communication still exist between stakeholders, particularly at national levels. Ideas to break those barriers down were generated e.g. creating common geodata environments to create synergies amongst data users, solutions-oriented data alliances between the public and private sectors,

and national mapping agreements across government for access to authoritative data and technical expertise.

- The importance of international workshops and activities that bring together representatives from across all sectors and organisations was recognised as key to sharing ideas, presenting successes and failures, generating learning from others, establishing new collaborations, and ultimately improving cooperation across the region. The importance of initiatives such as Open Maps for Europe was also recognised – by creating data together, everyone is invested in the work.
- Countries are experiencing similar challenges and it was recognised that there are similar ways to avoid/tackle those challenges. The importance of establishing partnerships that are mutually beneficial to all involved would ensure their success and longevity.
- Funding issues are limiting the benefits of partnerships (and wider data integration activities in general) and effective communication measures need to be targeted at stakeholders at senior management levels in particular to ensure the long-term sustainability of such activities.
- Greater collaboration with the private sector was recognised as important to generating greater synergies and harmonisation.

8. Key takeaways from the workshop included:

- By experts opening up and sharing experiences at the workshop, the building blocks towards greater integration have been developed. Excellent examples of best practices were shared, providing inspiration for future work.
- Frameworks are an important means of bringing different datasets together to solve common challenges. Building trust in data is key and Artificial Intelligence (AI) can help to harness the benefits of data and its integration.
- Achievement of the 2030 Agenda is still some way off and the next framework needs to be developed as a stronger integrative framework.
- There needs to be a shared understanding of common challenges at every level of organisation and the benefits of integrating statistical and geospatial data need to be more effectively communicated with decision-makers.
- Task Forces will be an important means of addressing concrete challenges and such work needs to progress more actively in the future.
- The greater engagement and participation of EECCA countries in data integration activities will ensure that the benefits are equally achieved across the region.

9. All abstracts, papers, presentations and other relevant materials from the workshop are available at the UNECE wiki page: <https://statswiki.unece.org/x/7AHnFw>. For ease of reference, the workshop timetable is also included in Annex 1.

Annex 1: Joint UNECE, Eurostat, UN-GGIM Europe Workshop on Integrating Statistical and Geospatial Data, 4-5 October 2023, House of the National Assembly, Belgrade, Serbia

DAY 1 – Wednesday 4 October

09:00	Registration	
09:30	Welcome and Opening Remarks. UNECE, Eurostat, UN-GGIM: Europe, General Director of Statistical Office of the Republic of Serbia, General Director of the Republic Geodetic Authority of the Republic of Serbia, and President of the National Assembly of the Republic of Serbia.	
09:50	Session 1: Effective Governance Session Chair: James Norris (UN-GGIM: Europe)	
09:55	Supporting capacity development in data integration: Key activities and emerging outcomes. Taeke Gjaltema and Sara Stewart (UNECE)	Presentation
10:10	Towards better Integration of statistical and geospatial information in the EU. Márta Nagy-Rothengass and Bianka Fohgrub (Eurostat)	Presentation
10:25	Bridging the digital divide to harness the value of data integration. Tomaž Petek and Carol Agius (UN-GGIM: Europe)	Presentation
10:40	Q&A	
11:00	Break and Networking	
11:30	The European Path Towards Standardised Geospatial Statistics. Ingrid Kaminger and Rossano Figueiredo (European Forum for Geography and Statistics & GEOSTAT4)	Abstract Presentation
11:45	A national cross-domain stakeholder network as the key tool for the integration of statistics and geospatial information in Finland. Panu Muhli (National Land Survey of Finland), Mervi Haakana and Rina Tammisto (Statistics Finland)	Abstract Presentation
12:00	Q&A	
12:15	Interactive Activity	
13:00	Lunch	
14:00	Session 2.1: Data and Technology - Design, Production and Analysis Session Chair: Carol Agius (UN-GGIM: Europe)	
14:05	Lost in Space: Two stage stratified sampling designs for household surveys in the presence of spatial autocorrelation. Brian Blankespoor and Michael Wild (The World Bank)	Abstract Presentation
14:20	Census Data path - from Territorial Preparation to Dissemination. Lucia Vanišová and Martin Kočíš (Statistical Office of the Slovak Republic)	Abstract Presentation
14:35	Enabling data linkage on pseudonymised address data. Justin McGurk (Central Statistics Office, Ireland)	Abstract Presentation
14:50	Q&A	
15:00	Break and Networking	
15:30	Updating DEGURBA classification integrating data from 2021 Census - The Portuguese territory case. Célia Ferreira, Goretti Nunes and Francisco Valla (Statistics Portugal)	Abstract Presentation
15:45	Swift Response to Earthquake: Population Mobility Project. Mert Kubilay Uludag, Selin Erturk and Birkin Erguc (TurkStat, Republic of Türkiye)	Abstract Video Presentation
16:00	The Procedural Sequence and Geospatial Analysis of the Map on Facilities and Services of General Interest (CE-SIG). André Rodrigues, Carla Cardoso, Francisco Inocêncio, João Garra, Miguel Bastos, Paula Cruz and Francisco Vala (Statistics Portugal)	Abstract Presentation
16:15	Geospatial and Statistical Data as a Core Instrument for Digital Transformation in Serbia. Darko Vucetic (Republic Geodetic Authority of the Republic of Serbia)	Abstract Presentation
16:30	Q&A	
16:45	Closing Day 1	

DAY 2 – Thursday 5 October

09:30 Session 2.2: Data and Technology – Visualisation, Dissemination and Web Technologies Session Chair: Tæke Gjaltema (UNECE)		
09:35	Effective Data Visualisation Techniques for Thematic Mapping. Alen Mrgud (Agency for Statistics of Bosnia and Herzegovina)	Abstract Paper Presentation
09:50	The OECD Municipal Atlas. Claudia Baranzelli (OECD)	Abstract Presentation
10:05	Best Practices and Innovation in the Data Lifecycle. Kate Hess and Richard Estephan (Esri)	Abstract Presentation
10:20	Fundamental Data Domains to support statistical-geospatial data integration. Jerker Moström (Statistics Sweden)	Abstract Presentation
10:35	Q&A	
10:45	Break and Networking	
11:15	The NSDI Geoportal of Ukraine as a basis for the geospatial and statistical data of the state. Vadym Nesuk (State Service of Ukraine for Geodesy, Cartography and Cadastre)	Abstract Presentation
11:30	National Spatial Data Infrastructure for the development of Statistical Sector in Albania. Vilma Tomco and Klaudio Çollaku (State Authority for Geospatial Information, Albania)	Abstract Presentation
11:45	WebSIG: Map on Facilities and Services of General Interest - CE-SIG. Carla Cardoso , André Rodrigues, João Poças, Miguel Bastos, Paula Cruz, Rossano Figueiredo and Francisco Vala (Statistics Portugal)	Abstract Presentation
12:00	Q&A	
12:15	Lunch	
13:30 Session 3: People and Partnerships Session Chair: Márta Nagy-Rothengass (Eurostat)		
13:35	Advancing the Integration of Geoinformation in Statistical Production: Strategy and Use Cases in Switzerland. Michael Bühler and Romain Douard (Federal Statistical Office, Switzerland)	Abstract Presentation
13:50	The way towards a Geospatial Knowledge Infrastructure: Some considerations. Nathalie Delattre (UN-GGIM: Europe Working Group on Data Integration)	Abstract Presentation
14:05	Q&A	
14:15	Interactive Activity	
15:00	Break and Networking	
15:30	Governance, Technology and Collaboration in Integrating Statistical and Geospatial Data – Examples in Norway. Marianne Vik Dysterud (Statistics Norway)	Abstract Presentation
15:45	Norwegian Support to Geospatial Sector in the Republic of Moldova: Sixteen Years of Capacity Development. Maria Ovdii (Agency of Land Relations of the Republic of Moldova) and Elena Busch (Norwegian Mapping Authority)	Abstract Paper Presentation
16:00	Q&A	
16:10	Interactive Activity	
16:50	Workshop Close: Future Challenges and Opportunities. Workshop Secretariat	
17:00	Closing Day 2 and End of Workshop	