



Luxembourg, 16 April 2019

## **Minutes of the meeting of the Working Group "Integration of statistical and geospatial information"**

**Held on 28 March 2019**

Luxembourg, Eurostat - BECH building, room Ampere

### **1. Approval of the agenda, adoption of minutes of the previous meeting**

The chair of the meeting, Ruxandra ROMAN-ENESCU (Head of Unit E-4, Eurostat) welcomed all participants and proposed the agenda of the meeting. The agenda was approved.

The minutes<sup>1</sup> of the previous meeting, held on 17 April 2018 were adopted without changes.

### **2. Nature of the meeting**

The meeting was non-public.

### **3. List of points discussed**

All presentations are available from the CIRCABC<sup>2</sup> site of the 2019 Working Group.

#### **Item 2: Total Surface Area and Total Land Area 2016 data**

##### *Discussion*

Eurostat noted that the document under preparation is not yet finalised. The Working Group will be consulted on this Item with a written procedure.

#### **Item 3: GEOSTAT 3 – An implementation guide for the GSGF for Europe – final results**

##### *Presentation*

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<sup>1</sup> <https://circabc.europa.eu/ui/group/50720c2a-c841-4b50-8f15-6f450a141707/library/88e6be87-4501-4101-8e21-a7742e8b3d9a/details>

<sup>2</sup> <https://circabc.europa.eu/ui/group/50720c2a-c841-4b50-8f15-6f450a141707>

The GEOSTAT consortium presented the results of the GEOSTAT 3 project. The main goal of the project was to develop a European guide for the implementation of the Global Statistical Geospatial Framework (GSGF). The input into this implementation guide had come from a variety of sources, including relevant national activities, research, project activities and discussions with UN-GGIM and UN-GGIM: Europe stakeholders.

The Implementation Guide is supplemented with a case study on using the GSGF for SDG reporting, a case study using SDMX for the implementation of an OGC Table Join Service, and a collection of national good practices covering all principles, recommendations and requirements.

The Implementation Guide issues a set of requirements for all five principles of the GSGF that are expanded upon with concrete recommendations for implementation. The recommendations are grouped according to their urgency for implementation, and according to responsible stakeholders.

The Implementation Guide advises countries to take a step-wise approach to the implementation of the recommendations starting with a state of affairs assessment. International and national collaboration between geospatial agencies and statistical offices will be a key enabler to achieve the requirements of the GSGF. The national good practices collected by the project provide valuable examples that NSIs can adapt to their national situation.

The international stakeholders such as Eurostat and UNECE should support the implementation of the GSGF and its further development, and ensure coherence and consistency in terms of methodology and timing. As the Implementation Guide is a living document, they should also take on the responsibility to maintain it.

### Discussion

Several Member States welcomed the results from GEOSTAT 3 and have already used the Implementation Guide for advancing geospatial information management in NSIs. The material produced by the project greatly facilitated the communication and cooperation with internal and external stakeholders, such as mapping authorities and governments.

Other positive aspects mentioned were the clear recommendations that could easily be converted into stepwise action plans, the clear assignment of responsibilities, and the fact that the recommendations could be implemented in a flexible, modular way.

The eminent contribution from GEOSTAT 3 to the international work on the development of the GSGF was highlighted and acknowledged.

The UNECE, EuroGeographics and Eurostat underlined the usefulness of the results for international capacity development, for setting priorities for international programmes of work and for the cooperation of geospatial agencies and statistical offices. The UNECE welcomed the connections made between the GSGF and their Modernisation of Official statistics activities.

The Member States requested that Eurostat work on a coherent timetable for the implementation, and asked Eurostat, the UNECE and UN-GGIM: Europe to ensure the consistency between the GSGF, its implementation in Europe and other relevant methodological work.

Eurostat and national statistical and geospatial authorities should also solicit high-level support for achieving the goals of the GSGF. Here, the priority should be on removing legal and organisational obstacles for the integration of statistical and geospatial information.

To be fully complete, a next version of the GSGF should also address geocoding of incidents in addition to statistical units.

### Conclusions

- The GISCO working group welcomed the results of the GEOSTAT 3 project as an important contribution to advancing the integration of statistical and geospatial information at national, European and global level.
- Statistical offices and geospatial agencies are encouraged to work together on the implementation of the recommendations from the Implementation Guide and assume joint responsibility for the GSGF.
- Eurostat will support the further development of the Implementation Guide and of the GSGF in the upcoming GEOSTAT 4 call for proposals, taking into account suggestions from Member States.
- Eurostat will explore within the ESS governance structure how to advance the development and coherent implementation of the GSGF-Europe, and how to ensure its maintenance.

## **Item 4: GEOSTAT 4 – call for proposals**

### Presentation

The GEOSTAT action has the goal to develop a coherent and complete methodology for geospatial information management in official statistics within the ESS based on the UN Global Statistical Geospatial Framework (GSGF). The series of ESSnets projects started in 2010 and is expected to finish in April 2022 when the upcoming GEOSTAT 4 project will be completed.

Eurostat will launch the GEOSTAT 4 call for proposals titled '*An operational Global Statistical Geospatial Framework for the ESS (GSGF-Europe)*' in the first half of 2019. The contribution from Eurostat will be €500,000.

The GEOSTAT 4 consortium should consist of up to eight NSIs and be supported by the National Mapping and Cadastral Authorities, the UNECE and UN-GGIM: Europe. Cooperation with the UNECE will be essential to ensure the coherence of the GSGF-Europe with the family of standards developed under the Modernisation of Official statistics activity of the UNECE.

The call for proposals is structured into six work packages. The first two packages deal with the development of the GSGF-Europe and its implementation, the third with geospatial quality management, and the last three with communication, capacity development and outreach. The maintenance of the EFGS website and the organisation of two EFGS conferences is part of the call for proposals. One of the key and innovative aspects of the project will be Work Package 3 with the goal to mainstream the quality management of

geospatial information into the existing quality system of the ESSC, e.g. by including related aspects into the ESS peer reviews.

As a result of GEOSTAT 4, the methodological and implementation guidance for the ESS and NSIs should be completed and its implementation tested through a number of use cases. In addition, the quality assurance of geospatial information will be integrated into the existing ESS quality system. In terms of capacity development and information sharing, the European Forum for Geography and Statistics should keep and strengthen its position as the network of excellence for the integration of statistical and geospatial information in official statistics.

### Discussion

Several Member States welcomed the planned GEOSTAT 4 call for proposals as an important contribution to the completion and adaptation of the GSGF methodology to the situation in the ESS. Sweden, Finland and Poland expressed their interest to participate.

The strong focus on implementing the GSGF through practical use cases was particularly appreciated.

The descriptions of the work package on methodology and implementation should be fine-tuned, and the good practices from GEOSTAT 2 and 3 should be considered in the final selection of the use cases.

Additional tasks could include the assessment of the suitability of the GSGF-Europe based on the lessons learnt in the use cases, and a task on planning the future development and maintenance of the GSGF-Europe after the end of GEOSTAT 4.

### Conclusions

- The working group welcomed the planned GEOSTAT 4 project and supported its scope and goals.
- Eurostat will refine the final text of the call for proposal to address the comments made during the meeting.

In anticipation of the launch of the call for proposals, the countries who expressed their interest to participate should start forming a consortium and involve interested National Mapping Authorities.

## **Item 5: Announcement of the 2019 EFGS conference**

### Presentation

The 2019 conference of the European Forum for Geography and Statistics will take place on 10-11 October 2019 in Manchester. The conference is being hosted by the ONS, UK supported by the Statistical Office of European Union (Eurostat) and the EFGS. The theme of the conference is 'Statistics + Location --> Insight + Impact', which aims to highlight how insights into the population and the world in general are greatly enhanced through the integration of statistics and place. The conference registration opened on 1 April 2019. All relevant information on the conference including topics, the draft programme and planned key notes can be found on the conference website <https://www.efgs2019.uk/efgs2019/>.

## **Item 6: Experience in Geocoding statistics in a federal statistical system**

### Presentation

The geocoding strategy at the Federal Statistical Office of Germany was presented, covering the fundamental understanding of the concepts of geocoding and de-referencing, particularly in the context of open data. Germany indicated that currently 80% of ‘geocodable’ data are actually geocoded, with the aim being to geocode all ‘geocodable’ statistics. The availability of addresses and legal issues in Germany’s federal system with respect to the use of spatial data are some of the current challenges the country is facing. In the discussion that followed, Spain also noted that there is a need to involve those at a political level in order to improve the effectiveness of integrating geospatial and statistical data.

## **Item 7: Experiences in geocoding statistics from ESS Vision 2020 ADMIN grants**

### Presentation

Eurostat presented the main elements of the project ESS Vision 2020 ADMIN that is focusing on social statistics and aims to make better use of available administrative information. Eurostat grants support this project, including one Work Package related to dwelling/population registers for the 2021 census. Confidentiality, data quality and methodological support are the main challenges of the project. In the discussion that followed, the question was raised as to what actually is the definition of “administrative data”? Administrative data are from sources other than the NSIs and can be ministries, governmental bodies or private companies (insurance companies, etc.)

## **Item 8: LAU’s identification**

### Presentation

The Working Group was informed on the work of Switzerland in dealing with LAU changes and in keeping track of these changes over time. A number of Member States and Eurostat indicated that they have similar problems and have developed their own approaches to deal with them. These Member States indicated that a common approach in this respect would be beneficial. As the UN-GGIM: Europe could address this issue, Eurostat proposed to raise this with them in the following day’s meeting.

## **Item 9: Geospatial data and analysis for the assessment of investment need in EU regions and cities**

### Presentation

DG REGIO presented the EU cohesion policy context and its objectives, supported by an investment for economic growth, sustainable development, business competitiveness, etc. of one third of the EU budget. The cooperation of the NSIs and NMCAs is crucial for the geocoding and geo-referencing of information needed for the production of regional data and the assessment of regions. Two examples of regional comparability were presented; access to universities and accessibility by road and rail using the 1 km<sup>2</sup> population grid. The grid level analysis, combined with comprehensive road and rail data, ensures the flexibility of the output results and visualisation of the transport patterns and challenges the regions are facing in terms of infrastructure, spatial distribution of population and opportunities for active modes. DG REGIO mentioned the existence of an EU legal framework aiming at the provision of standardised public transport timetables by 2025.

## **Item 10: Tour de table on the cooperation between NSIs and NMCAs, on the use of geospatial data and services for statistics, and the priorities for the GISCO working group in the coming years**

### Presentation

Following a request from Eurostat, participating countries presented their views on cooperation between the NSIs and NMCAs, the situation in their countries regarding the availability of LAU geometries, and their expectations towards Eurostat-GISCO to support their activities.

The following current cooperation areas between the NSIs and NMCAs were reported on:

- Geocoding and geo-referencing (with addresses, postal codes, etc.)
- Support to Census 2021 implementation
- Geographical data sharing, with a common infrastructure
- Update of geographical datasets: AU, SU, LAU, NUTS, coastline.
- Methodology (spatial analysis, area calculation, etc.)
- Web mapping application design
- Support to INSPIRE implementation
- Activities on SDGs

The following expected cooperation areas between the NSI and NMCAs were reported on:

- Geocoding and geo-referencing (business register, on networks, from cadastral parcels)
- Support to Census 2021 implementation
- Geographical data sharing – common infrastructure – data governance
- Spatial analysis and production of geographical statistics (Land use and cover, agriculture, real estate price, etc.)
- Web mapping for gridded data and with vector tiling
- Activities on SDGs
- Access to other GI information from ministries (transport, agriculture, etc.)

Regarding the availability of LAU geometries, there is a large range of situations across the countries: LAU geometries are easily available in most countries, sometimes with open licenses. However, some countries still face significant restrictions. The update frequency and timeliness is also irregular and some countries have already adopted continuous updating procedures. In terms of resolution, 1:1k to 1:10k geometries are available in most countries. Future improvements are expected in most countries towards more open access, better updates, finer resolutions, richer download services and the publication of historical data.

Concluding on this Item, the Chair noted that participating countries expressed their wish to cooperate further in the following areas:

- Geocoding and geo-referencing (with addresses, postal codes, etc.)
- Support to Census 2021
- Geospatial data sharing – common infrastructure.
- Update of geospatial datasets: AU, SU, LAU, NUTS, coastline.
- Methodology (spatial analysis, area calculation).
- Web mapping application design.

- INSPIRE implementation.
- Activities on SDGs.
- Support sharing on experience and good practice, networking.
- Foster collaboration between EU-level organisations such as UN-GGIM: Europe, the UNECE, EFGS, EuroGeographics, etc.
  - Foster cooperation between the NMCAs and NSIs. Create legislation on data access and financial support (grants, projects, training).
  - Improve the availability of pan-European geospatial datasets from Member States' data (specification, central infrastructure).
  - Development of geospatial statistical products.
  - Central coordination of the development of grid based statistics.
  - Coordination of INSPIRE themes (population and health) and promote the use of SDMX.
  - Promote harmonisation, standardisation and common methodologies.
  - Provide a centralised infrastructure for geospatial data.
  - Guidance on the geocoding of new data sources.
  - Support TSA/TLA calculations.

#### **Item 11: On-line publication on the grants results**

##### Presentation

Since 2012, the ESS Action “Merging Statistics and Geoinformation” has been executed following the endorsement of the ESS on “The need for closer cooperation on geospatial information “. To create greater awareness at higher management levels in the ESS, Eurostat decided to produce an online publication of the main results of the grants from 2012-2015 with 2 to 4 pages per country. This publication should be released early 2020.

#### **Item 12: Merging Statistics and GI**

##### Presentation

There were three presentations under this item. The first one introduced the seven 2018 Merging Statistics and Geo-information Grants that are currently in progress. This year, Cyprus and Iceland applied for their first grant along with previous grant users Denmark, Finland, the Netherlands, Poland, and Sweden. A brief description of the actions for each project was given. The main areas of action in the 2018 series are the 2021 population census, earth observations and confidentiality. Furthermore, Slovenia and the Netherlands shared with the Working Group their experiences in implementing the GSGF and an analysis of spatial and temporal patterns during the last decade.

#### **Item 13: Summing-up.**

The chair summarised the main discussions of the meeting.

#### **4. Next meeting**

The respective dates for the next Working Group and the Joint UN-GGIM: Europe – ESS – UNECE meetings are tentatively scheduled for 26 & 27 March 2020 in Luxembourg.

## **Annex: List of participants**

### **EU national delegates**

<i>Country</i>	<i>Institution</i>	<i>Delegate name</i>
Belgium	Federal Public Service FINANCE   Patrimonial Documentation   The Administration Measurements and Assessments	Brecht VANDEWALLE
Belgium	Nationaal Geografisch Instituut	Ingrid VANDEN BERGHE
Belgium	National Geographic Institute	Nathalie DELATTRE
Belgium	Statistics Belgium	Pierre JAMAGNE
Bulgaria	Geodesy, Cartography and Cadastre Agency	Ivan KARCHEV
Bulgaria	National Statistical Institute	Irena DUDOVA
Denmark	Agency for Data Supply and Efficiency	Olav EGGERS
Denmark	Statistics Denmark	Linea LØFQVIST
Denmark	Statistics Denmark	Michael RASMUSSEN
Germany	Federal Statistical Office	Holger HEIDRICH-RISKE
Germany	National Mapping Agency	Franka KUNZ
Germany	National Mapping Agency	Sonja WERHAHN
Ireland	Central Statistics Office	Dermot CORCORAN
Ireland	Ordnance Survey Ireland	Anthony MURPHY
Greece	Hellenic Statistical Authority (ELSTAT)	Vangelis KOTZAMANOGLOU
Spain	Cadastral Agency	Amalia VELASCO
Spain	Cadastral Agency of Navarre	Maria CABELLO
Spain	Instituto Geografico Nacional	Antonio AROZARENA VILLAR
Spain	National Statistical Institute	Ignacio DUQUE RODRÍGUEZ DE ARELLANO
Spain	National Statistical Institute	Manuel ILLANES MELLID
France	INSEE	Vincent LOONIS
France	Institut national de l'information géographique et forestière	François CHIRIÉ
France	Institut national de l'information géographique et forestière	Dominique LAURENT
Croatia	Croatian Bureau of Statistics	Branko CRKVENČIĆ
Croatia	Croatian Bureau of Statistics	Andrej CUPIC
Italy	Istat	Pina grazia TICCA
Cyprus	National Mapping Agency	Marios THEMISTOCLEOUS
Cyprus	Statistical Service Of Cyprus	Anastasia PASHIARDI
Latvia	Central Statistical Bureau of Latvia	Dāvis KĻAVIŅŠ
Luxembourg	National mapping agency	Danielle HORPER
Luxembourg	National mapping agency	Jeff KONNEN
Luxembourg	STATEC	Charlie KLEIN

<i>Country</i>	<i>Institution</i>	<i>Delegate name</i>
Hungary	Hungarian Statistical Office	Jozsef GERSE
Malta	Malta Statistics Authority	Andrew FORMOSA
Netherlands	Kadaster Netherlands	Dorus KRUSE
Netherlands	Statistics Netherlands	Linda DE JONGH
Netherlands	Statistics Netherlands	Bresters PIETER
Austria	Bundesamt für Eich- und Vermessungswesen BEV (National mapping agency)	Gerda SCHENNACH
Austria	Statistik Austria	Ingrid KAMINGER
Poland	Statistics Poland	Janusz DYGASZEWICZ
Poland	Statistics Poland	Mirosław MIGACZ
Poland	Statistics Poland	Anna SLAWINSKA
Portugal	Portugal Continental	Ana SANTOS
Romania	NSI Romania	Daniel VIRDOL
Slovenia	Statistical Office of the Republic of Slovenia	Igor KUZMA
Slovenia	Surveying and Mapping Authority of the Republic of Slovenia	Uroš MLADENOVIC
Slovenia	Surveying and Mapping Authority of the Republic of Slovenia	Tomaz PETEK
Slovakia	The Statistical Office of the Slovak Republic	Robert GRAC
Finland	National Land Survey of Finland	Panu MUHLI
Finland	Statistics Finland	Rina TAMMISTO
Sweden	Statistics Sweden	Jerker MOSTRÖM
United Kingdom	Office for National Statistics	Chris GALE
United Kingdom	Office for National Statistics	Heather PORTER
United Kingdom	Ordnance Survey Limited	Neil SUTHERLAND

#### **EFTA countries**

<i>Country</i>	<i>Institution</i>	<i>Delegate name</i>
Norway	Statistics Norway	Erik ENGELIEN
Switzerland	Swiss federal statistical office	Romain DOUARD

#### **Candidate and potential candidate countries**

<i>Country</i>	<i>Institution</i>	<i>Delegate name</i>
Albania	Institute of Statistics of Albania (INSTAT)	Nexhmije LECINI
Bosnia and Herzegovina	Agency for statistics of Bosnia and Herzegovina	Bakir SUJOLDZIC
Kosovo	Kosovo Agency of Statistics	Idriz SHALA
North Macedonia	State Statistical Office	Goran KIRANDZISKI

<i>Country</i>	<i>Institution</i>	<i>Delegate name</i>
Serbia	Republic Geodetic Authority, Republic of Serbia	Nemanja PAUNIĆ
Serbia	Statistical Office of the Republic of Serbia	Jelena DENIC
Turkey	Turkish Statistical Institute	Birkan ERGUC

### **European Commission**

<i>Directorate General</i>	<i>Delegate name</i>
DG Agriculture and Rural Development	Benjamin VAN DOORSLAER
DG Agriculture and Rural Development	Gesa WESSELER
DG Eurostat – E-2	Ekkehard PETRI
DG Eurostat – E-4	Ruxandra ROMAN ENESCU (Chairperson)
DG Eurostat – E-4	Nikolaos ROUBANIS
DG Eurostat – E-4	Julien GAFFURI
DG Eurostat – E-4	Jørgen RASMUSSEN
DG Eurostat – E-4	Jane SCHOFIELD
DG Eurostat – F-2	Fabian BACH
DG Regional and Urban Policy	Hugo POELMAN
JRC CCR Joint Research Centre	Vlado CETL
JRC CCR Joint Research Centre	Peter STROBL

### **Invited observer**

<i>Institution</i>	<i>Delegate name</i>
European Environment Agency	Stefan JENSEN
EuroGeographics	Carol AGIUS
European Forum for Geography and Statistics	Janusz DYGASZEWICZ
European Umbrella Organisation for Geographic Information	Alejandro GUINEA
The United Nations Economic Commission for Europe (UNECE)	Steven VALE
ESPON EGTC	Sandra DI BIAGGIO
ESPON EGTC	Laurent FRIDERES
ESPON EGTC	Martin GAUK
ESPON EGTC	Marjan VAN HERWIJNEN