

# **UNGGIM Europe - contribution to the more effective management and availability of geospatial information in Europe**

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## **SUMMARY**

After 10 years of work United Nations initiative on Global Geospatial Information Management (UN-GGIM) draws on the national capacities and capabilities of Member States. It takes a leading role in setting the agenda for global geospatial information development and promotes the benefits of geospatial information for addressing national policy and key global challenges. UN-GGIM serve as a mechanism for making joint decisions and setting directions with regard to the production, availability and use of geospatial information within national, regional and global policy frameworks. Led by United Nations Member States, UN-GGIM: Europe aims to address European regional challenges regarding the use of geospatial information, including in the development agendas, and to serve as a body for regional policymaking in the field of geospatial information management. Governance and institutional arrangements present a clear division of roles and responsibilities among organizations involved in geospatial information management, and the formal and informal structures of cooperation and collaboration between and among organizations.

In this paper will be present strategy of UN GGIM Europe and activities of working groups within work program. There will be also present Integrated Geospatial Information Framework (IGIF) which provides a basis and guide for developing, integrating, strengthening, and maximizing geospatial information management and related resources in all countries.

# UNGGIM Europe - contribution to the more effective management and availability of geospatial information in Europe

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## 1. ABOUT UN-GGIM Europe

The United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) is a formal intergovernmental mechanism established by the Economic and Social Council (ECOSOC) in 2010. Led by United Nations Member States, the Committee of Experts has played a leading role in making joint decisions and in setting the direction on the management of geospatial information in national and global policy frameworks.

UN-GGIM works with governments to improve policy, institutional arrangements, and legal frameworks and provides a forum to liaise and coordinate among and between Member States and International organisations. The Committee of Experts develops strategies and frameworks to help address global challenges and build geospatial capacity in both developed and developing countries.

UN-GGIM: Europe is one of five regional committees of the global UN-GGIM architecture, and was formally established in 2014, at the first plenary meeting held in Chisinau, Moldova. The aim of UN-GGIM: Europe is to contribute to the more effective management and availability of geospatial information in Europe. According to the Articles of UN-GGIM: Europe, the Regional Committee *shall identify European issues relevant to geospatial information management and recommend necessary actions on them for the furtherance of the discussions in UN-GGIM so that the economic, social and environmental benefits of European geospatial information are maximized* (Article 2 of the Articles<sup>i</sup> of UN-GGIM: Europe).

At the eight plenary meeting of UN-GGIM: Europe, the Regional Committee proposed and approved a reviewed strategy and associated workplan. These two documents, were developed and drafted in order to ensure that the regional needs and objectives remain aligned to the global UN-GGIM programme within the context of a rapidly changing societal, policy and digital landscape.

## 2. Changing landscape

As the world recovers from a global pandemic and faces increasing climate disruption, environmental disasters and displacement and movement of peoples, there is a growing global awareness of the value and importance of having access to trusted location-based data. These global challenges and the need for action are amplified in many reports and frameworks, including the 2030 Agenda for Sustainable Development, the Paris Agreement on Climate

Change, Sendai Framework for Disaster Risk Reduction 2015-2030 and the Intergovernmental Panel on Climate Change (IPCC) Report 2021.

At the same time, we are witnessing a shift in the importance of data and digital technologies. The Third Edition of UN-GGIM Future Trends<sup>ii</sup> report talks about new information requirements and user data needs, and emerging technological and digital communication platforms and tools. Social media platforms, artificial intelligence, machine learning and remote sensing are changing how data are acquired and processed. As a result, issues related to data privacy, data confidentiality, and data ethics are at the top of the agenda.

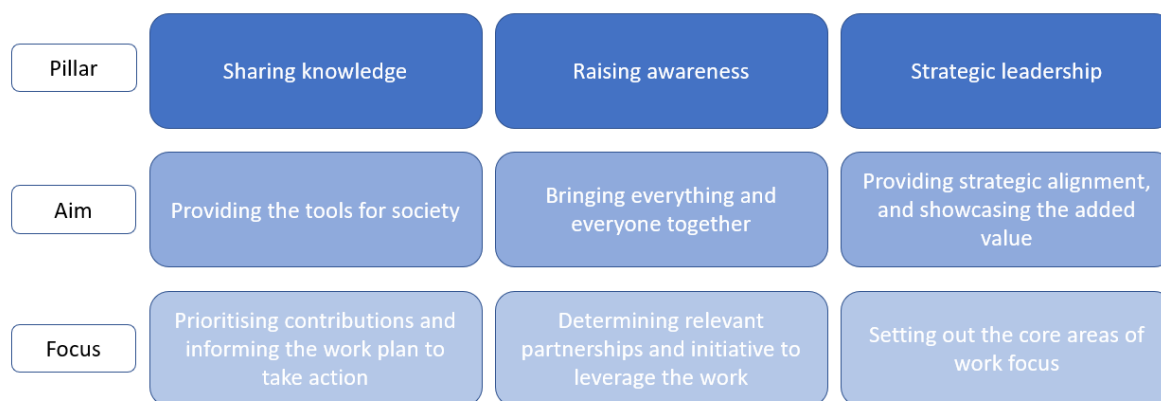
In order to help Member States, meet these challenges the Committee of Experts has drafted and developed a number of documents and frameworks. These include the Global Fundamental Geospatial Data Themes<sup>iii</sup>, the Framework for Effective Land Administration<sup>iv</sup>, the Global Statistical Geospatial Framework<sup>v</sup>, the SDGs Geospatial Roadmap<sup>vi</sup> and the Integrated Geospatial Information Framework<sup>vii</sup>.

Within our regional context, the European Green Deal<sup>viii</sup> establishes a green transformation within the ambit of the United Nation's Sustainable Development Goals. The European Union's vision for the 'digital decade' aims at empowering people and businesses based on a human-centred and sustainable approach as well as improve the well-being and health of citizens and future generations. Furthermore, the European strategy for data adopted in early 2021, and its proposed Regulation on European data governance, has the ambition of a 'society empowered by data', anchoring data as the basis for better decision making. Emerging policies and legislations that support open public sector data, common data spaces, data governance, the ethical use of artificial intelligence, provision of digital services and concepts towards a geospatially enabled 'knowledge infrastructure' have an impact on data integration and its provision throughout the region.

The vision of UN-GGIM: Europe is "building on the overarching vision of UN-GGIM of positioning geospatial information to effectively address global challenges." While the mission is to "maximise the use of geospatial information in Europe for a safer and more sustainable world." In order fulfil the vision and mission of UN-GGIM: Europe, the Regional Committee launched a new strategy<sup>ix</sup> and work plan<sup>x</sup> that complements the changing global and regional policy and data landscape.

### **3. UN-GGIM: Europe strategy and lines of work**

The refreshed strategy of UN-GGIM: Europe is structured into three main strategic pillars which will help frame and inform the work and objectives of the Regional Committee for the next five years from 2022. The three strategic pillars of Sharing Knowledge, Raising Awareness and Strategic Leadership are interdependent.



*Schema 1: Three interdependent strategic pillars of the refreshed strategy of UN-GGIM: Europe*

The aims and focus of each pillar together articulate the ambition of UN-GGIM: Europe to achieve its mission. The strategic pillars hold a complementary nature and their combined actions drive the success of the Regional Committee. The strategy is the basis from which the UN-GGIM: Europe work plan is developed.

**The Sharing knowledge pillar** is focused on delivering activities that are relevant for European Members and international partners aiming to provide the tools to enable society to identify and realise the benefits of using geospatial information integrated with statistical information. By establishing the key areas of action, this pillar informs the main activities to be delivered by the Regional Working Groups and is supported by an objective work plan with tangible results and outcomes.

**The Raising Awareness pillar** is centred on raising awareness of the value of geospatial data through identifying and building relevant partnerships and initiatives which support the Regional Committee’s mission. Raising awareness for UN-GGIM: Europe is crucial for ensuring greater levels of participation in the work plan and making sure that the outcomes from the Work Plan are adopted as widely as possible.

**The Strategic Leadership pillar** focuses on how UN-GGIM: Europe continues to be an active and relevant body within the European Region. There are several organisations and initiatives within and across Europe dealing with geospatial information, so this Pillar is critical to developing and showcasing the added value the UN-GGIM: Europe brings. Whilst at the same time avoiding duplication of efforts.

The aims, focus and goals of each of these three strategic pillars are translated into a regional work plan, approved annually in the plenary meeting, and put into practice by activities and tasks carried out by the Executive Committee of UN-GGIM: Europe, the UN-GGIM: Europe Secretariat, and Regional Working Groups.

#### 4. The Work Plan

Deriving the UN-GGIM: Europe work plan from the regional strategy makes it both complementary with the global programme while also resonating with the specific needs and requirements of our region. This is circular and iterative process.

The initial steer of the strategy is informed by the global priorities of Committee of Experts, jointly decided at the annual meeting. These in turn inform and shape the UN-GGIM: Europe strategy and work plan. The work plan is the blueprint that facilitates the collaboration of European Member States, European Institutions and observer bodies to work together to progress key priorities that are relevant to the region.

Sharing the European experiences gained through regional work with the global functional groups and reporting back annually to the Committee closes the circular process, which is repeated annually.



*Schema 2: Circular process for sharing regional experiences*

The UN-GGIM: Europe proposes five key priority area that meet the strategic alignment of the needs and requirements of Europe within the global programme of the Committee of Experts:

- Integrated Geospatial Information Framework
- Geodetic Reference Frames
- Data Integration
- Sustainable Development Goals
- Data Strategy and Policy

A brief overview of each of the lines of work follows

#### **4.1 Integrated Geospatial Information Framework**

The Integrated Geospatial Information Framework (IGIF) can be considered the 'umbrella framework' for the activities of UN-GGIM integrating much of the work and achievements of the Committee into an all-encompassing frame work which will enable countries apply transformational change in the national management of geospatial information. The purpose for this line of work is to support the regional representatives on the High-level Group on the Integrated Geospatial Information Framework (HLG-IGIF), provide the views of the European Region as the IGIF matures, and to consider activities which will benefit members of UN-GGIM: Europe.

#### **4.2 Global Geodetic Reference Frames**

As a region, Europe already has many players active in the field of geodesy. So, this line of work will be considered a 'light touch' activity which draws on the existing expertise within the region but does not overstretch or duplicate existing resources. Allowing the UN-GGIM: Europe region to contribute to the global efforts while supporting the UN-GGIM Subcommittee on Geodesy's priorities for the Global Geodetic Reference Frame. It is important to consider, in this context, that the Global Geodetic Centre of Excellence will be established in Europe.

#### **4.3 Data Integration**

The topic of data integration is a central issue in the current European landscape focus on data strategy. Increasing data interoperability, standardization and quality are key points in this framework of moving towards data driven-innovation and evidence-based decisions and policies. This line of work seeks to explore ways to contribute and support activities promoting geospatial and statistical data integration, including reinforcing the involvement of the Earth Observations (EO) community.

#### **4.4 Sustainable Development Goals**

Sustainable development will continue to mark the global agenda and, as 2030 approaches, measuring progress towards the SDGs will become increasingly relevant, both at regional and national levels, with geospatial data playing an important role to provide context and deliver data to operationalize indicators. This line of work focuses on maintaining the active

contribution of UN-GGIM: Europe on showcasing the added value of integrating geospatial data with other data to address SDG indicators.

#### **4.5 Data Strategy and Policy**

As a region Europe has wide ranging policy and legislation that impact on geospatial data. While avoiding overlapping and duplicating efforts this line of work will contribute to the understanding and development of relevant policy and data strategies regarding the management and use of geospatial data to maximise its value in addressing the challenges of a green, sustainable and digital Europe.

### **5. IMPLEMENTING THE STRATEGY AND WORK PLAN**

The reviewed strategy and work plan are owned by the Executive Committee of UN-GGIM: Europe, and the Regional Committee has the responsibility in ensuring that the aims and the objectives outlined in the documents are delivered. However, the ambitions outlined in the strategy can only be achieved if the lines of work are put into practice.

The strategy and work plan were presented and approved by Members of UN-GGIM: Europe at its eight plenary meeting in October 2021. Following the annual regional session, the executive Committee engaged with the broad UN-GGIM: Europe community to activate and implement the lines of work outlined in the work plan. Currently the process of detailing terms of reference and deliverables of the five lines of work is underway. To this end collaboration is encouraged across the broad geospatial community in Europe. This includes national mapping and cadastral authorities and national statistical institutes in the European Region, along with European Institutions and observer bodies the UN-GGIM: Europe.

### **6. CONCLUSIONS**

The mission of UN-GGIM: Europe to *maximise the use of geospatial information in Europe for a safer and more sustainable world* is timely as Europe, together with the rest of the world, emerges from the Covid-19 pandemic and faces renewed challenges brought by climate, environmental, human and economic disruption.

Experts are aware of the value that geospatial data brings to evidence base decision and policy making. We have seen how strategies, frameworks, standards, and policy developments, such as those developed globally by UN-GGIM and in regionally in Europe can be combined to harness and maximise, and the value of data.

The reviewed strategy with its three pillars of sharing knowledge, raising awareness and strategic leadership is anchored to the global programme of UN-GGIM. In addition, the work plan, with its five lines of work is tailored to the needs and requirements of our region. The broad geospatial community is encouraged to engage, collaborate and contribute to the delivery

of the strategy and work plan. This approach is how UN-GGIM: Europe is helping contribution to the more effective management and availability of geospatial information in Europe strategy.

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## BIOGRAPHICAL NOTES

**Tomaž Petek** is General Manager of Surveying and Mapping Authority of the Republic of Slovenia and chair of UN GGIM Europe Executive Committee. He is a public sector specialist with extensive experience in geodetic authority, geoinformation, land cadastre, spatial data infrastructure and governmental reform and development of geoinformation infrastructure in Republic of Slovenia. During professional carrier working on several positions related with topographic and cartographic system in Slovenia and as director of Ljubljana regional cadastral Authority. He was actively involved in many activities of Eurogeographics and UN-GGIM: Europa. He was also involved in several national and international projects related with land registration and spatial data management. As the expert he is actively involved in the INSPIRE implementation at the national level and in the implementation of the key European projects in the area of geoinformation.

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**Carol Agius** is Knowledge Exchange Manager and UN-GGIM: Europe Secretariat for EuroGeographics, the independent international not-for-profit organisation representing Europe's National Mapping, Cadastral and Land Registration Authorities. She has over 30 years' experience within the international geospatial community which includes leading the large-scale topographic mapping production in the Maltese national mapping agency while also chairing the EuroGeographics Quality Knowledge Exchange Network. Carol provides the Secretariat to UN-GGIM: Europe, promoting its activities and ensuring that relevant organisations are well informed about the Committee. In addition, she is responsible for coordinating EuroGeographics Knowledge Exchange activities. Carol has post-graduate degrees in both GIS and Strategic Quality Management and is also a Chartered Geographer (GIS) with the Royal Geographical Society.

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