# **Committee of Experts on Global Geospatial Information Management**

#### Thirteenth session

New York, 2 - 4 August 2023 Item 19 of the agenda

Report of the Committee of Experts on its thirteenth session

Informal paper containing draft decisions (Part I) 4 August 2022

#### 13/101

## **Enhancing global geospatial information management arrangements**

- (a) Welcomed the report of the Secretariat and the expanded Bureau and commended the significant efforts in continuing to take strategic and practical actions to continue to strengthen and enhance the coordination and coherence of global geospatial information management arrangements and related interlinkages for Member States, as aligned to the implementation of ECOSOC resolution 2022/24;
- (b) Noted the ongoing budgetary process associated with the adoption of resolution 2022/24 by ECOSOC and the inclusion of performance measures and results focused on accelerated implementation of the UN-IGIF within the Department of Economic and Social Affairs (DESA) strategic objectives and elements, and in this regard, underscored the importance of continued advocacy and raising awareness within and among Member States and their Permanent Missions in the next steps and final negotiations for adequate and sustainable resources within the Secretariat, and requested an update on the outcomes of the process;
- (c) Expressed its appreciation to the Government of India, through its Ministry of Science and Technology for the successful convening of the Second United Nations World Geospatial Information Congress in Hyderabad, India, in October 2022, acknowledged the efforts of the International Advisory Committee (IAC) to develop and implement the substantive program with a focus on the United Nations Integrated Geospatial Information Framework (UN-IGIF), and applauded the inclusion and participation of youth, school children and the normally under-represented in the Congress program;
- (d) Welcomed the invitation from the Government of Mexico to host the Seventh High-level Forum on Global Geospatial Information Management in Mexico City in October 2024, with the theme 'Accelerating Implementation: Achieving Resilience' and confirmed the Committee's support in the development and implementation of the program of the Forum alongside the eleventh plenary meeting of UN-GGIM Americas;
- (e) Welcomed and supported the commitment from the Kingdom of Saudi Arabia to host and establish a United Nations Global Geospatial Ecosystem Centre of Excellence in Riyadh, Kingdom of Saudi Arabia, and encouraged the Bureau and Secretariat to work with the Kingdom of Saudi Arabia to clarify and refine the scope and remit of the Centre to ensure it aligns with the work programme of the Committee of Experts and complements the activities and established agendas of the UN Centres in Deqing and Bonn in order to avoid duplication;

- (f) Noted the progress and efforts to finalize the modalities for the establishment of the United Nations Global Geospatial Knowledge and Innovation Centre in Deqing, China, and the United Nations Global Geodetic Centre of Excellence in Bonn, Germany, as tangible means to develop and expand global geospatial capacity and capability, and to strengthen geospatial information management arrangements in countries, especially developing countries, and looks forward to ongoing updates on the operations of the Centres at future sessions of the Committee of Experts;
- (g) Recognized the efforts of developing countries to enhance and support the leadership roles within national geospatial and mapping agencies to ensure that effective geospatial information management contributes to increased geospatial capacities and capabilities, and shared knowledge for geospatial enablement across and within Member States;
- (h) Noting the side event convened on 'Inclusion and diversity in geospatial information management' and the continued interest and discussion forums held during the intersessional period, supported the suggestions to integrate the subjects of gender equality, inclusion and diversity into the Committee's agenda items, and encouraged its functional groups and thematic networks to integrate this topic in their work plans.

#### Contribution of regional committees to the global geospatial information agenda

- (a) Welcomed the report compiled by the Secretariat on the contributions and background documents prepared by the five regional committees to the global geospatial information agenda and congratulated them on their work and achievements during the intersessional period, including convening their annual plenary meetings between 2022 and 2023;
- (b) Further welcomed and recognized the efforts of the regional committees to strengthen engagement and alignment among the five regions, through effective communication and collaboration, increased awareness, sharing of knowledge, experiences, good practices, tools and technical experience, and inter-regional capacity development initiatives to strengthen national geospatial information management to further Member States' abilities to leverage the benefits of geospatial information, technology and innovation;
- (c) Appreciated the commitment of the Regional Committees to bring their regional perspectives and related strategies to the global level, and to support the alignment, dissemination, and implementation of the programme of work, global frameworks, and guidelines to advance the work of the Committee of Experts, while focusing on regional priorities and strengthening regional capacities;
- (d) Recognized the active commitment of the regional committees and the regional commissions, with the inputs of relevant stakeholders from the four thematic networks to continue to support Member States by providing forums for their representatives to meet, discuss and collaborate on the implementation of the global frameworks of the Committee of Experts, in particular the United Nations Integrated Geospatial Information Framework, and to address their combined challenges;
- (e) Noted the challenges being experienced by regional committees to provide the required resources and capacity to support national mapping and geospatial agencies, particularly in Africa, to be agile and dynamic in responding to technological change, to remain relevant, and to not be left behind; and encouraged Member States to continue contributing to, and taking advantage of, the possibilities

offered by the Committee of Experts to discuss, coordinate and improve the availability and use of geospatial information, including Earth observations, across all regions;

- (f) Noted the strategies and workplans prepared by the regional committees for the Americas and Europe, which have aligned their structures and work programmes to the global agenda while addressing regional geospatial needs and requirements, and welcomed the preparation of publications, the development of data dissemination platforms, e-learning courses and technical workshops conducted to strengthen the geospatial capacities of Member States;
- (g) Noted the proposed dates of upcoming plenary meetings of all five regional committees, in particular those in Asia and the Pacific, the Americas and Africa, which would be convened in the coming months, and encouraged Member State representatives in the regions and Chairs and or representatives of Regional Committees to attend and actively contribute to these plenary meetings.

## 13/103

# Contribution of thematic networks to the global geospatial information agenda

- (a) Welcomed the report compiled by the Secretariat on the contributions and background documents prepared by the four thematic networks to the global geospatial information agenda and expressed its appreciation for their continuing and valuable contributions to the programme of work of the Committee of Experts, including in research and the use of innovative technologies, education, and capacity development, in advancing the Sustainable Development Goals with geospatial products and services;
- (b) Appreciated the increased collaboration and partnerships between the four thematic networks and their collective efforts to achieve common goals toward promoting and strengthening the implementation of the United Nations Integrated Geospatial Information Framework and other global frameworks of the Committee of Experts;
- (c) Recognized the important role of the regional networks to strengthen the global network through a stronger representation of the regions in the governance structure of the Network, ensuring ongoing education for our geospatial professionals, and relevant knowledge, innovation and creativity can be better transferred and shared;
- (d) Noting the urgent need for students in developing countries and small island developing states to acquire higher qualifications in key specialized geospatial areas, such as geodesy, recognized that without close collaboration between academia and industry to provide pathways and possible ways forward to address these gaps in educational qualification and expertise, countries will fall further behind;
- (e) Acknowledged the significant use and increasing role of artificial intelligence (AI) and the work of the Academic Network on Geospatial artificial intelligence (GeoAI) in collaboration with the Private Sector Network, including on considering its ethical use and toward creating a body of knowledge on GeoAI, and noted this discussion should lead to concrete actions and taking next steps in authoritative GeoAI and its associated trust and use in the geospatial domain;
- (f) Noted the accomplishment of the Geospatial Network in strengthening the coherence of geospatial activities through an increase in its membership within the UN system and ongoing consultations on the One UN Geospatial Situation Room, and further noted that this capability should provide a means to share data with Member States, build upon the United Nations Integrated

Geospatial Information Framework and the Committee's global networks, and in this regard, could benefit from use cases that include a closer relationship with Member States.

# 13/104

#### The future geospatial information ecosystem

- (a) Welcomed the report of the Secretariat and efforts aimed at continuing to discuss and explore the future geospatial information ecosystem to assist Member States and national geospatial information agencies in their thinking on current and future geospatial environments, in which technological developments and innovative applications will play a crucial role;
- (b) Noted that new and emerging technologies and the wider digital and data ecosystems, of which geospatial data and services are a part, provide further opportunities to create, manage and access geospatial information in innovative ways, and that geospatially integrated data will support the immediacy of the UN's Global Digital Compact and in the future, provide critical context to the sustainable development frameworks beyond the 2030 Agenda;
- (c) Agreed that the definition and development of the future geospatial ecosystem is an opportune activity for the Committee of Experts to undertake but that it requires further scoping and consensus to identify and describe what the foundations of the future geospatial ecosystem will encompass within the purview of the Committee and, in this regard, suggested that further structure and detailed work on defining the Committee's understanding can take place and progress into general principles;
- (d) Supported the proposals to progress Option 2a in the report, to entrust the Bureau, supported by a writing team to develop a position paper on determining the scope and an outline on the fundamental elements and principles of the future geospatial information ecosystem for the Committee's consideration at its fourteenth session and welcomed the multiple offers by Member States to support the Bureau;
- (e) Reiterated the need to reduce the growing geospatial digital divide between developed and developing countries, to leverage existing exemplar examples and use cases within Member States, and to ensure the future geospatial ecosystem gives priority to the needs of developing countries and small island developing states (SIDS), including to keep promoting the systematic and comprehensive frameworks that make geospatial data, services and technology available to decision-makers;
- (f) Noted option (2b) to consider the establishment of a working group on the future geospatial ecosystem that could build upon the fundamental elements and principles of the future geospatial ecosystem and capture a number of priority aspects for developing countries and SIDS, including: capacity building and technical support; accessible and affordable solutions; regional collaboration; funding support, data sharing and capacity development;
- (g) Noted the relevance of the future geospatial ecosystem to the commitment from the Kingdom of Saudi Arabia to host and establish a United Nations Global Geospatial Ecosystem Centre of Excellence in Riyadh, the scope and remit of which, will need to align with the overall work programme of the Committee of Experts.

# **Integrated Geospatial Information Framework**

- (a) Welcomed the report of the High-level Group of the Integrated Geospatial Information Framework and congratulated the Group for its continued efforts to advance the role and relevance of the Integrated Geospatial Information Framework (IGIF) through a significant range of activities, including from broadening work group membership; developing communication materials; a sustainable funding guide and online tool; translating the IGIF suite of documents; and participating broadly in webinars, workshops, conferences, and events to promote and advance the IGIF;
- (b) Thanked the outgoing Co-Chair from Ethiopia and Member States of Fiji, Indonesia, Kyrgyzstan, Mongolia, Nepal and South Africa, for their contributions, and welcomed a new Co-Chair from Cameroon to the High-level Group with the new Member States of India, the Republic of Korea, Malaysia, Mozambique, the Russian Federation, and Rwanda, as nominated by the UN-GGIM Regional Committees;
- (c) Acknowledged the High-level Group's priority and urgency to refine, finalize, translate, and digitally publish the IGIF suite of documents, including the Overarching Strategy, the IGIF Implementation Guide and addendums, and the resource materials to support the UN Recommended Approach to Design and Develop Country-level Action Plans; all of which require adequate and additional resources;
- (d) Appreciated the considerable efforts of Member States, with coordination leadership from the UN-GGIM: Americas Academic Network, to informally translate the IGIF documents into several languages, and welcomed the offer from the Kingdom of Saudi Arabia to support the digital publication of the IGIF suite of documents;
- (e) Recognized the vital role of the regional committees, functional groups, and thematic networks of UN-GGIM in advancing the implementation of the IGIF and bridging the geospatial digital divide, and that the global advancement of the IGIF requires continued cooperation, coordination, and resourcing amongst these groups, as evidenced in many of the agenda items reported to this session;
- (f) Noted the Group's updated Terms of Reference and membership structure, its decision to adopt the 'United Nations Integrated Geospatial Information Framework (UN-IGIF)' in all correspondence and documentation when referring to the Framework, and that the High-level Group will meet in-person in the first quarter of 2024 to continue progress toward its strategic goals and objectives;
- (g) Commended the efforts of the SDG Data Alliance, the World Bank, and other regional collaborative partners to mobilize the necessary resources to assist developing countries in strengthening the advancement of the UN-IGIF and accelerating achievement of the Sustainable Development Goals, and noted the convening of the SDG Data Alliance Workshops 'Accelerating the achievement of the SDGs' as key capacity development and knowledge transfer elements of the ninth plenary meeting of UN-GGIM: Africa and International Cartographic Congress 2023 international meetings in Cape Town, South Africa in August 2023.

# Global geodetic reference frame

The Committee of Experts on Global Geospatial Information Management:

- (a) Welcomed the report of the Subcommittee on Geodesy and its progress and activities, including its considerable efforts to continue to implement General Assembly resolution 69/266 and grow the critical understanding, awareness, and importance of the global geodetic reference frame (GGRF) as a vital foundation for global geospatial and Earth observation infrastructure;
- (b) Welcomed the establishment and inauguration of the United Nations Global Geodetic Centre of Excellence (UN-GGCE) at the United Nations Campus in Bonn, Germany in March 2023, and commended the Government of Germany and the United Nations for their considerable preparatory efforts and in this regard, appreciated the efforts of Member States, including virtual secondments from France, Norway and Spain, in supporting and contributing to the Centre;
- (c) Acknowledged that, as the first dedicated resources to support the implementation of resolution 69/266, the Centre will be an important platform to encourage and improve international cooperation, provide technical assistance, capacity development, and to foster more significant planning and international coordination in pursuit of strengthening partnerships and opportunities enabled by geodesy;
- (d) Noted the Subcommittee's revised terms of reference and establishment of three new working groups to undertake a global geodesy needs assessment and to work towards a state of global geodesy report to promote coordination and coherence in sustaining the GGRF including, continuous improvement in geodetic infrastructure, improving investment in positioning supply chains, ensuring accurate geospatial information, and enhancing capacity development; while avoiding duplication of efforts and resources;
- (e) Welcomed the establishment of the International Advisory Committee of the UN-GGCE, which will provide the required guidance and advice on the development, implementation, and review of the substantive annual program of work of the GGCE in a transparent and inclusive manner;
- (f) Reiterated the importance to consult and engage with Member States to determine their operational geodetic requirements and encouraged the Subcommittee to work with regional committees and relevant partners, including the International Association of Geodesy, the International Federation of Surveyors, and the ISO/TC211.

#### 13/107

#### Geospatial information for sustainable development and climate resilience

- (a) Welcomed the report jointly prepared by the Secretariat and the working group on geospatial information of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs) regarding the continued efforts to ensure that the contributions of the global geospatial information management community are aligned with the needs of the 2030 Agenda for Sustainable Development;
- (b) Noted the endorsement of the paper "Examples of the implementation of the SDGs Geospatial Roadmap: disaggregating the SDGs by geographic location" by the Statistical Commission at its 54th session, which supports the vision of geospatial and location-based information being recognized and

accepted as official data for the SDGs and their global indicators, and demonstrates the contribution of geospatial information to implementing the 2030 Agenda and the broader support to sustainable development and climate resilience;

- (c) Commended the United Kingdom for authoring the discussion paper, "Geospatial Information for Climate Resilience What Does UN-GGIM Do?" which articulates the intersectional nature of geospatial information with the valuable role of the Committee's frameworks and policies in combating the climate challenge, and draws attention to the potential role that national geospatial and mapping agencies could play in delivering data and technologies that assists countries in mitigating and adapting to climate change;
- (d) Appreciated the engaging side event on Geospatial Information for Climate Resilience convened on the margins of this session, which emphasized that acting on climate resilience is now imperative for the Committee of Experts, that we should not delay this item further, and that it is critically important to advocate for and raise awareness of the potential of geospatial information for climate resilience;
- (e) Supported elements of all three options as presented in the discussion paper, these being to: i) establish a task team under the purview of the Committee of Experts to strengthen interlinkages between geospatial, statistical, climate and other relevant communities and organizations of the UN system; ii) convene an appropriate and relevant international forum or event on geospatial information for climate resilience that brings relevant stakeholders together to establish an effective programme of work; and iii) develop a more detailed concept paper that expands on the relevant initiatives, activities and frameworks under the purview of the Committee of Experts;
- (f) Welcomed the multiple offers by Member States to support and contribute to the three options and invited the Bureau and Secretariat to work with Member States to determine the modalities for implementing the three options, and to report back on progress at the Committee's fourteenth session in 2024, potentially under a dedicated agenda item so as to not burden the program of work of the Working Group on Geospatial Information of the IAEG-SDGs.

#### 13/108

#### Integration of geospatial, statistical and other related information

- (a) Welcomed the report of the Expert Group on the Integration of Statistical and Geospatial Information and the continued efforts to support the integration of statistical and geospatial information through the implementation of the Global Statistical Geospatial Framework (GSGF) and guided by the new co-Chairs from Brazil and Ireland;
- (b) Urged Member States to continue to implement and operationalize the GSGF as a tool for attaining geospatially enabled statistical data for the 2030 Agenda for Sustainable Development and recognized that addressing the many data integration challenges presented by complex issues such as climate change and disaster resilience, requires the full implementation of the GSGF at the national and regional levels;
- (c) Noted decision 54/118 at the 54th Session of the Statistical Commission, which noted the Expert Group's revised terms of reference and work plan for 2022–2024, inclusive of expanding on the United Nations Integrated Geospatial Information Framework (UN-IGIF) for the statistical domain and updating the GSGF to reflect national and regional experiences in its implementation;

- (d) Noted further the efforts made to engage with the Statistical Commission through the side event at the 54th Session of the Statistical Commission entitled "Geo-Statistical Integration The Global Statistical Geospatial Framework (GSGF) and Beyond" which provided understanding that geospatial data answers the question of 'where', and that the successful integration of data from the statistical and geospatial domains can only be realized through cross-cutting collaborations between the statistical and geospatial communities;
- (e) Encouraged the Expert Group to follow the approach taken by the Working Group on Marine Geospatial Information in their development of the Operational Framework for Integrated Marine Geospatial Information Management to provide guidance on how the principles of the UN-IGIF can be applied to the statistical domain rather than expanding the UN-IGIF to include the statistical domain, which, if allowed to happen, could increase the complexity for implementation of UN-IGIF;
- (f) Welcomed the Expert Group's new strategic direction to be focused on strengthening interlinkages between the statistical and geospatial communities and, in this regard, urges the Expert Group to strengthen its collaboration with the regional committees of UN-GGIM and regional commissions of the United Nations and other relevant regional stakeholders, for the establishment of coherent layers of guidance from global, regional to national level;
- (g) Acknowledged the Expert Group's assessment that the substantive completion of the 2020 Round of Censuses has provided new insights into the ongoing implementation of the GSGF by Member States and further underscores the importance of leveraging the UN-IGIF as a key enabling framework for this effort; and the further refinement and strengthening of the GSGF through the addition of guidance on statistical grids, common geographies, user defined geographic units, and other topical issues;
- (h) Noted the joint UNECE/Eurostat/UNGGIM: Europe workshop which will be convened in Belgrade, from 4 5 October 2023 hosted by the Republic Geodetic Authority of Republic of Serbia, and which aims to bring together industry experts, thought leaders and professionals from statistical and geospatial organizations to share innovative and best practices relating to the integration of statistical and geospatial data at national and international levels.

#### Geospatial information and services for disasters

- (a) Welcomed the report of the Working Group on geospatial information and services for disasters, noted its work during the intersessional period, including how the Working Group has raised awareness and assisted in the monitoring and implementation of the Strategic Framework on Geospatial Information and Services for Disasters, progress on its work plan 2020 2023, and options and recommendation for the Working Group's future;
- (b) Appreciated the commitments by Member States to promote and implement the Strategic Framework on Geospatial Information and Services for Disasters as a means to provide quality geospatial information and services to support decision-making and disaster risk management efforts, the Sendai Framework on Disaster Risk Reduction and achieving the 2030 Agenda for Sustainable Development;

- (c) Welcomed the proposal to examine and review the relevance and utility of the Strategic Framework every three to five years and for the Working Group to work towards integrating geospatial information with other relevant information for disaster risk reduction and resilience;
- (d) Noted the efforts of the Working Group to engage a wider community of practice, to cultivate partnerships, and to learn and develop various scenario options from experts within the different regions, and encouraged the Working Group to consider guidance on how geospatial and statistical information can be applied in the development of indicators that measure preparation, mitigation and adaptation, in order to monitor the long-term vulnerabilities of communities and infrastructure to disasters and climate change;
- (e) Noting the call of the Working Group to revitalize and strengthen its modalities, urged the Working Group, once its current work plan concludes, to assess its working modalities with a view to identifying strategies to strengthen its operations including its membership, and reviewing its terms of reference, particularly given the need to institute processes and structures to continuously manage the inventory hub and maintain the completeness and currency of the data to ensure its sustainability and usefulness.

#### Implementation and adoption of standards for the global geospatial information community

- (a) Welcomed the report of the three standards development organizations, namely, the International Hydrographic Organization (IHO), technical committee 211 of the International Organization for Standardization (ISO/TC211) and the Open Geospatial Consortium (OGC), on the implementation and adoption of standards for the global geospatial information community, noted the broad range of geospatial standards considered, and expressed its appreciation to the three standards development organizations for their valuable work and continuing support;
- (b) Appreciated the continued alignment of the standards development organizations with the work of the Committee of Experts and welcomed the many examples of how countries are using the standards for advancing data access and interoperability, demonstrating the benefits of implementing geospatial standards to ensure standards accountability and compliance of practice in modern information systems and applications across many business and government sectors, such as Smart Cities, Urban Digital Twins, Intelligent Transport Systems and Energy to name a few;
- (c) Encouraged the broad use of standards and the standards guide to support the implementation of standard-based solutions that ensure interoperability, data sharing and flexibility to adapt to changing data sources and technologies, noting that the real value of standards is in their actual use in the process of implementation and operation;
- (d) Noted the second edition Land Administration Domain Model (LADM) currently under development in collaboration with the standards development organizations and the International Federation of Surveyors (FIG), and considering essential elements that will assist Member States, in effective land administration, land valuation, marine geo-regulation, and geospatial planning information;
- (e) Noted further that within the marine domain, ensuring the integration of marine data into the larger geospatial information ecosystem, standardized data will be critical for supporting the next

generation of navigation services, including enabling the coordinated use of charting, currents, marine protected areas, weather, and other data in navigation systems;

(f) Encouraged Member States and the Regional Committees to participate in the continued development, maintenance and advancement of geospatial standards in collaboration with the standards development organizations, to increase the quality, interoperability and application of standards, and to provide practical examples and best practices on the implementation of geospatial standards to support the measurement and monitoring of the Sustainable Development Goals.

