Contribution of regional committees and thematic groups to the global geospatial information agenda

Note by the Secretariat

Summary

The present paper contains the report of the contributions of regional committees and thematic groups to the global geospatial information agenda for consideration by the Committee of Experts on Global Geospatial Information Management.

At its tenth session, held virtually on 26 and 27 August and 4 September 2020, the Committee of Experts adopted decision 10/102, in which it congratulated the five United Nations Global Geospatial Information Management regional committees and their respective working groups on their work and achievements, and recognized that their outputs were vital sources of knowledge for decision-making and that strong and active regional committees contributed to the realization of the overall work programme and vision of the Committee of Experts. The Committee expressed its appreciation for the continuing and valuable contributions of the thematic groups to the programme of work of the Committee and commended the United Nations Geospatial Network for its review of the status of the geospatial landscape in the United Nations and for its strategic design and activities that will guide the future work and activities of the Geospatial Network.

This present report provides information on the contributions and achievements of the following nine regional committees and thematic groups: the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific; the Regional Committee of United Nations Global Geospatial Information Management for the Americas; the Regional Committee of United Nations Global Geospatial Information Management for Africa; the Regional Committee of United Nations Global Geospatial Information Management for Europe; the Regional Committee of United Nations Global Geospatial Information Management for the Arab States; the United Nations Global Geospatial Information Management Geospatial Societies; the United Nations Global Geospatial Information Management Academic Network; the United Nations Global Geospatial Information Management Private Sector Network; and the United Nations Geospatial Network. The report contains reflections on the regional and thematic architecture and information regarding the progressive maturity achieved by the regional committees and thematic groups over the past decade.
This report provides information on the activities and achievements of the regional committees and thematic groups since the tenth session of the Committee of Experts, held virtually on 26 and 27 August and 4 September 2020, including the meetings of regional committees, the plenary meetings of thematic groups and workshops held during the intersessional period. The report also provides an overview of their work in the following areas: (a) the Integrated Geospatial Information Framework; (b) sustainable development; (c) land administration and management; (d) disaster risk reduction; (e) the integration of geospatial information and statistics; (f) legal and policy frameworks; (g) the global geodetic reference frame; (h) marine geospatial information; (i) the implementation and adoption of geospatial standards; (j) global fundamental geospatial data themes; (k) regional and international collaboration and capacity development; (l) priority issues, challenges, future plans and events; (m) strengthening the coordination and coherence of geospatial information management activities within the United Nations system; and (n) the geospatial response to the coronavirus disease (COVID-19) pandemic.

The report also contains information on how the four thematic groups of the Committee of Experts have helped strengthen geospatial information management across their respective areas, and across Member States. This includes the progress of the United Nations Geospatial Network and its expansion in membership to encompass 37 entities across the United Nations system, the development of generic geospatial job descriptions for the United Nations system and its efforts to strengthen the coordination and coherence of geospatial information, including its collaboration with the Committee for the Coordination of Statistical Activities.
I. Introduction

1. At its tenth session, held virtually on 26 and 27 August and 4 September 2020, the Committee of Experts adopted decision 10/102, in which it congratulated the five United Nations Global Geospatial Information Management (UN-GGIM) regional committees and their respective working groups on their work and achievements, and recognized that their outputs were vital sources of knowledge for decision-making and that strong and active regional committees contributed to the realization of the overall work programme and vision of the Committee of Experts. The Committee expressed its appreciation for the continuing and valuable contributions of the thematic groups to the programme of work of the Committee and commended the United Nations Geospatial Network for the preparation of the document entitled “Blueprint: geospatial for a better world – transforming the lives of people, places and planet” and its companion document, entitled “Blueprint: geospatial landscape of the United Nations system”. Further, the Committee of Experts encouraged continued cooperation and collaboration among the regional committees and thematic groups, in alignment with the activities of the Committee of Experts and the United Nations regional commissions, including efforts to strengthen and increase the use of geospatial information in response to the COVID-19 pandemic.

2. Notwithstanding the economic, social and environmental impacts resulting from the COVID-19 pandemic, combined with the impacts and effects of climate change, and extenuating working conditions, the representatives of the regional committees and thematic groups of the Committee of Experts continued to deliver on their regional and global geospatial information management work programmes. Over the intersessional period, there has noticeably been an upsurge in geospatial collaborative activities across UN-GGIM groups, networks and related stakeholders, which may be attributed to operating in a virtual environment. These activities have signaled an unprecedented strengthening in the coordination and coherence of global geospatial information management, in capacity-building, and knowledge exchange.

3. This present report summarizes the main activities and achievements of the five regional committees and four thematic networks of the Committee of Experts, including their regional plenary meetings, accomplishments of their respective working groups, capacity-building initiatives, and actions taken to support Member States over this intersessional period. The reports of the regional committees and thematic network groups are provided as background documents to this present report. The Committee is invited to take note of this report.

II. Regional Committees of UN-GGIM

A. Plenary Meetings

4. The annual meetings of the regional committees provide a forum for Member States and other relevant geospatial stakeholders to share and exchange knowledge, technologies and best practices, network, and gain updates on the activities of their regional working groups.

<table>
<thead>
<tr>
<th>Regional Committees</th>
<th>Dates of Last Annual Meeting</th>
<th>No. Participants and Member States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia and the Pacific</td>
<td>9th Plenary, 3 &amp; 5 Nov. 2020</td>
<td>128 Ps and 27 MS</td>
</tr>
<tr>
<td>Americas</td>
<td>7th Session, 10-11 Sep. 2020</td>
<td>128 Ps and 27 MS</td>
</tr>
<tr>
<td>Africa</td>
<td>6th Session, 1-4 Sept. 2020</td>
<td>90 Ps and 32 MS</td>
</tr>
<tr>
<td>Europe</td>
<td>7th Plenary, 22-23 June 2020</td>
<td>100 Ps and 34 MS</td>
</tr>
<tr>
<td>Arab States</td>
<td>8th Plenary, 23 Feb 2021</td>
<td>46 Ps and 13 MS</td>
</tr>
</tbody>
</table>

*Table 1 UN-GGIM Regional Committee Annual Meetings 2020-2021*

All five regional committees convened their annual meeting during the intersessional period as shown in Table 1.
5. The general practice of regional committees convening their annual meetings in conjunction with other geospatial events continued. UN-GGIM Europe’s seventh plenary meeting overlapped with the 2021 plenary session of the Conference of European Statisticians and included a common session between both bodies. In addition, UN-GGIM Americas seventh session was held within the framework of AmeriGEO week, which included a joint session between both bodies. These arrangements serve the mutual benefits of the parties and is an effective means of maximizing human resources and time management.

6. As is the standard of practice, regional committees, through consensus adopt resolutions at the end of each annual meeting. For the reporting period, it was noted that most resolutions strongly supported and reinforced the alignment of the regional committees work to the UN-GGIM global work agenda, as evidenced in areas such as the implementation of the Integrated Geospatial Information Framework (IGIF), the global geodetic reference frame and the integration of statistical and geospatial information. A notable outcome from the Regional Committee of UN-GGIM America’s annual meeting, and the joint session with AmeriGEO was the Aguascalientes Declaration, Better Together: Geospatial Information for Decision Making in the Americas. The objective of this joint agreement is to strengthen and improve collaboration between the parties on the use of Earth Observations, geographic, statistical and other information to support decision making and solving national and regional development issues.

7. Table 2 shows the proposed Regional Committee’s annual meetings for 2021 to 2022. The Committee of Experts is being asked to note the dates of the proposed annual meetings.

<table>
<thead>
<tr>
<th>Regional Committees</th>
<th>Date of Upcoming Annual Meetings</th>
<th>Mode and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia and the Pacific</td>
<td>10th Plenary, Nov. 2021</td>
<td>Hybrid or virtual</td>
</tr>
<tr>
<td>Americas</td>
<td>8th Session, 17-19 Nov. 2021</td>
<td>Virtual</td>
</tr>
<tr>
<td>Africa</td>
<td>7th Session, 22-26 Nov. 2021</td>
<td>Hybrid Abidjan, Cote d’Ivoire</td>
</tr>
<tr>
<td>Europe</td>
<td>8th Plenary, 13-14 Oct. 2021</td>
<td>Virtual</td>
</tr>
<tr>
<td>Arab States</td>
<td>9th Plenary, 14-16 Feb. 2022</td>
<td>Abu Dhabi, United Arab Emirates</td>
</tr>
</tbody>
</table>

Table 2 UN-GGIM Proposed Regional Committee Annual Meetings 2021-2022

B. Regional Committees Work Programmes

8. The work programmes of the regional committees are executed through their working groups. Each committee has between two to four active working groups covering a total of seven agenda items. Table 3 shows the work areas addressed by each regional committee. All five regional committees are actively contributing to the integration of statistical and geospatial data, which is an indication of the level of interest on the work items by Member States. The global geodetic reference frame is second, with four regional committees having working groups that address this work item. There may be a probable correlation between the number of interventions received per agenda item at each UN-GGIM annual session, and the number of working groups per work item across regional committees. For the eighth and ninth UN-GGIM sessions, the global geodetic reference frame agenda item received the most interventions. For the same years, the integration of statistics and geospatial information received the third most interventions. Delving even further, it was noted that the second most received interventions over the same years were for the strengthening of geospatial information and the integrated geospatial information framework. If the correlation sighted before is correct, meaning, a high number of interventions signifies work being done at the regional level through working groups. Then, following this line of reasoning, it would be expected that at minimum, four regional committees should have had working groups to
address strengthening geospatial information/IGIF. This however is not the case, currently only UN-GGIM Americas has a working group on geospatial data infrastructure. Therefore, the question may be asked, should regional committees consider establishing working groups to support the implementation of the IGIF?

<table>
<thead>
<tr>
<th>Work Items/Working Group</th>
<th>Asia &amp; Pacific</th>
<th>Americas</th>
<th>Africa</th>
<th>Europe</th>
<th>Arab States</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Integration of statistical and geospatial data</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>ii. Data and standards</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>iii. Disasters</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv. Geospatial data infrastructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v. Global geodetic reference frame</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>vi. Cadastre and land management</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>vii. Institutional arrangements and policy and legal framework</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*Table 3 UN-GGIM Regional Committees Work items/Working Groups*

9. A common theme throughout all regional committees’ reports was the emphasis placed on forging partnerships, collaborations and capacity building initiatives regionally, across the UN system and with key stakeholder groups. This is supported by the many virtual webinars and forums shared in all five reports. While there is a high degree of collaboration by regional committees among UN-GGIM functional groups, thematic networks and the UN system, strengthening the level of communication and partnerships could be accommodated among regional committees. While, each regional committee has its own administrative characteristics, varying geopolitical arrangements and different challenges, there remain commonalities such as practices, norms, solutions and resources that may be shared and exchanged at the regional and country level.

10. The following are a list of some items/resources developed by regional committees contained in their eleventh session reports, and members of other regional committees may find them to be useful for their situations.

(a) Asia Pacific
   ii. Geospatial Industry Digital Roadshow – virtual site

(b) Americas
   i. Interactive Geovisor SDI 2021
   ii. MEGA – web application for the integration of statistical and geospatial information for the Americas
   iii. SDI dynamic dashboard for the Americas

(c) Africa
   i. Financial appropriation framework with an assessment of the economic benefit of geospatial information management for Africa
   ii. E-learning course on evaluating the socio-economic benefits of investing in geospatial information.

(d) Arab States
   i. Arab Geospatial Portal
C. Challenges being experienced by UN-GGIM Regional Committees

11. The road to successful geospatial information management can be full of potholes, with the possibility of breakdowns and accidents, however those that succeed are the ones who know the potential challenges on the road and address them. The regional committees have shared in their reports, their challenges, have tendered possible strategies and have also asked UN-GGIM stakeholders for assistance. The following are some of the main challenges and issues shared in their reports.

(a) There is an unequal distribution of geospatial resources coupled with a lack of capacity and financial and human expertise to support COVID-19 recovery in Asia and the Pacific, Africa and the Caribbean.

(b) Inertia on the part of Member States in the Americas to implement the UN-GGIM frameworks, and therefore the need to garner greater institutional commitment to support the projects and work programme of the regional committee.

(c) UN-GGIM Europe has identified the need for improved collaboration between the statistical and geospatial communities, in addition to strengthening capacity building efforts across and within the region.

(d) A call for adequate resources, policy guidance and ground level support to develop IGIF national action plans, and to advance the implementation of activities on the integration of statistical and geospatial information for African countries, was made by their regional committee.

12. All regional committees expressed commitment to continue providing their regions with forums for their representatives to meet, discuss and collaborate on addressing their challenges, and also gave assurances to continue to align their work to the changing environment and the global geospatial agenda. The annual reports of all five regional committees are provided as background documents to this present report under agenda item four.

III. Thematic Groups of UN-GGIM

D. UN-GGIM: Geospatial Societies

13. The UN-GGIM: Geospatial Societies is currently chaired by the International Federation of Surveyors (FIG). In its report to the Committee of Experts, pertinent activities of its member organizations were provided. Notwithstanding the COVID-19 pandemic, Geospatial Societies’ member organizations proceeded with the implementation of their work programmes and conducted major conferences, workshops, and other events virtually.

14. The UN-GGIM Secretariat especially notes the contributions made by the following members of the Geospatial Societies in advancing the global geospatial information management agenda.

(a) The International Association of Geodesy in supporting the work of the UN-GGIM sub-Committee on Geodesy and the establishment of the Global Geodetic Centre of Excellence;

(b) The International Cartographic Association for recognizing the topics of the IGIF and the Sustainable Development Goals in its work program. The Secretariat also notes and welcomes the book “Mapping for a Sustainable World”; and

(c) The International Federation of Surveyors for consideration how to increase cooperation and join efforts within the Society to improve cooperation and support the Committee of Experts.
15. The UN-GGIM community is invited to review the report of the Geospatial Societies provided as a background paper to this report to learn of the many plans, projects, and initiatives being implemented, and the seminars and conferences to be convened. Given the mandates, and extensive geospatial work programmes of the nine members of the Geospatial Societies, there is a strong probability that members of the UN-GGIM community should be able to identify opportunities to forge partnerships, gain new knowledge and innovations in support of their work at the national and regional levels.

E. UN-GGIM: Academic Network

16. The UN-GGIM: Academic Network has matured into its second round of administrative arrangements with the election of a new Executive Committee and Advisory Board. The Network is now led by the Politecnico di Milano, Italy and Ryerson University, Canada, chair and deputy chair respectively. During the reporting period the Network revised its terms of reference which now includes the new member category, Associate Member. The Network also updated its website and are developing more efficient administrative procedures.

17. A noteworthy achievement was the publication of two books, one focusing on COVID-19; geospatial information and lessons learnt, and the other on mapping and sustainable development, which was done in collaboration with the International Cartographic Association. Another important achievement of the Network was the assignment of its members to provide support to all five UN-GGIM regional committees, its functional groups and other thematic networks. These assignments have already begun to positively impact the work of the Working Group on Disasters among other functional groups of the Committee of Experts.

18. The Academic Network’s report and terms of reference are provided as background documents to this report, to be noted by the Committee of Experts. Member States, observers and the general UN-GGIM community are invited to read the report, to learn of the current work, areas of research, collaborations, and future work to be pursued by the Network. As noted in the summary for the Geospatial Societies, collaborations and partnership opportunities abound and should be pursued.

F. UN-GGIM: Private Sector Network

19. The UN-GGIM: Private Sector Network (PSN) is currently chaired by Geospatial World India. The 167 member companies of the PSN are working towards achieving the vision of setting the agenda for the development of global geospatial information and to promote its use to address key global challenges, enable citizen services and support the initiatives of the Committee of Experts, particularly the global development agenda.

20. The PSN’s report is available as a background document to this report. It details its purpose, vision, governing board, members, and areas of work and future plans. Its representatives serve on several UN-GGIM Regional Committees, functional groups and other networks. Highlights of their contribution to the work of the Regional Committees of the Americas and Asia Pacific, as well as the Expert Groups on Land Administration and Management, and the Integration of Statistical and Geospatial Information, and also the Policy and Legal Frameworks for Geospatial Information Management Working Group, are provided. The Committee of Experts is also asked to note an overview/background paper on ‘Geospatial Infrastructure for Advancing Sustainable Development’ submitted with their annual report. The paper highlights the role of geospatial infrastructure in the fourth industrial revolution and how geospatial technology and innovation (including digital twin) can increase productivity, transform working methods, and bring citizens new and better goods and services to improve their lives.
G. United Nations Geospatial Network

21. During the intersessional period the United Nations Geospatial Network started the implementation of its milestone inter-agency strategy “Blueprint, Geospatial for a Better World: Transforming the Lives of People, Places and Planet”. During this period the Network completed its 2019-2021 work programme as detailed in the background document on further building the Network, establishing partnerships and communication. Some major highlights of its work included: the deployment of its website, preparation of the generic job profile available for geospatial professionals, and the release of two publications on activities in the United Nations system, entitled “Geospatial in Action – Data and Insights for the Sustainable Development Goals” and “Geospatial for Humanity: Prevention, Response and Recovery on the World COVID-19 Pandemic” respectively. Both publications inform on the value, use and relevance of geospatial information management in support of the mandates of the United Nations.

22. The Network also renewed the composition of its Steering Group, during its Plenary held virtually on 16 July 2021, with the United Nations Environment Programme serving a second term as Chair. Vice Chairs are the United Nations Children’s Fund and United Nations Institute for Training and Research. Further membership details are provided in the Network’s annual report.

23. The Network’s priorities, guided by its five-year strategy and included in the Blueprint (2020), are a strategic focus on governance, technology and people, as presented in the background document. In this context of upcoming priorities, the Network, through its Chair, is a Member of the UN Data Governance Group of the Secretary-General’s Data strategy. However, the Network remains challenged to be recognized as a distinct component underpinning decision-making, monitoring activities and a key component to the wider data ecosystem, possibly as reflecting challenges of some Member States. The strengthening of global geospatial information management in the wider UN system is still hampered by challenges of recognition of the expertise, positions, resources and awareness to highest bodies within its own institutional context.

24. While the UN Geospatial Network conducted its activities diligently to strengthen the coordination and coherence of global geospatial information management in the wider UN system, the Network is aware that its achievements relied solely on voluntary contributions from the leadership, secretariat and its members. The successes of the Network despite challenges in resources, underline the question on the sustainability of its activities, and highlight the need for sustainable resources for the Network to ensure its continued effectiveness and impact, including substantive secretariat support, to facilitate capacity-building, standards-setting and data collection management, as well as to address mandates of Member States brought to the Organization. The Network is also mindful of the need for sustainability, seniority and gender equality of leadership positions of the UN Geospatial Network as they will be critical to ensure that the momentum is continued during these early years of existence of the Network.

IV. Items for consideration

25. The UN-GGIM Secretariat notes with appreciation the concerted and consistent efforts expended by the regional committees, functional groups and thematic networks to align their work programmes with those of the Committee of Experts. The Secretariat also recognizes the considerable contributions, including technical expertise, advice, time and other resources expended in participating in the events and activities of the Committee of Experts. This is also evidenced by the achievements made in work items such as: the global geodetic reference frame; the development and implementation of the IGIF; the integration of geospatial information and statistics; and cadastre and land management; in addition to the numerous capacity building interventions and preparation of technical geospatial information publications.
26. Notwithstanding these achievements, opportunities remain for the regional committees and thematic groups to strengthen their approaches towards better sharing and exchange of geospatial information management practices and solutions. In addition, increased communication and information sharing and participating in each other’s respective annual meetings and workshops ensures greater synergies, successful projects and programmes, reduces duplication of efforts and maximizes the use of scarce human and financial resources. Further, regional committees and thematic groups are encouraged to maintain and make current the content of their websites, as they serve not only as a source of information for members, but also as a repository of guidelines, educational content and establishes and builds their committee/group brand and reputation.

V. **Recommended for noting by the Committee of Experts**

27. The Committee of Experts is invited to take note of the present report and background documents provided by the five regional committees and four thematic groups of UN-GGIM. The Committee is also invited to note the upcoming plenary meetings of all five UN-GGIM regional committees as shown in Table 2.

28. Additionally, the Committee is invited to note the ongoing work and activities of the UN Geospatial Network to strengthen the coordination and coherence of global geospatial information management in the wider UN system, including:

   (a) The Generic Geospatial Job description for geospatial professionals as an important reference for the UN system, to establish clear and consistent denomination, responsibilities, and hierarchical roles, and as a milestone to promote the geospatial expertise and related professions;

   (b) Recognize that it would be useful to designate a Chief Geospatial Officer in each entity of the United Nations as a clear denomination of senior most representatives to the Network with the view to raise awareness to the management on the professions that can support to solve business and policy challenges that benefit from geospatial insight and management and that contribute to the wider data ecosystem;

   (c) Recognize the importance of having the managerial and political support at the highest level and need to endorse the UN Geospatial Network’s Blueprint and activities as a key component to the wider UN data ecosystem, and of the implementation of the Secretary General’s Data Strategy; and

   (d) Express its views on the need to adequately resource the Secretariat of the Network, to ensure substantive secretariat support and coordination of activities.