
Economic and Social Council

25 June 2014

Committee of Experts on Global Geospatial Information Management

Fourth session

New York, 6-8 August 2014

Item 6 of the provisional agenda*

Global map for sustainable development

Global map for sustainable development

Note by the Secretariat

Summary

The present paper contains the report of the Global Map for Sustainable Development Working Group for consideration by the Committee of Experts on Global Geospatial Information Management.

At its third session, held in July 2013, the Committee of Experts recognized the need for a closer working relationship between the Global Map for Sustainable Development (GM4SD) Working Group and the International Steering Committee for Global Mapping (ISCGM); to specify a narrower focus building on existing standards and regional initiatives; to provide a clear understanding of the needs and requirements of the sustainable development user community; and to collaborate with the United Nations Open Working Group on Sustainable Development Goals. The report describes the activities of the Working Group, summarises the outcomes of the Chengdu Forum, interactions with the United Nations Open Working Group, the High Level Political Forum on Sustainable Development, and the upcoming Third World Conference on Disaster Risk Reduction. The report outlines the collaboration between the GM4SD Working Group and the ISCGM, in which the Working Group would assume an advisory role, whilst ISCGM would focus on the operational implementation of the work programme. In preparation for contribution to the post-2015 development agenda, the report also brings attention to the need for more advocacy efforts in order to better understand the needs and requirements of the sustainable development user community. The global geospatial community should continue to demonstrate how geospatial methods and applications can enable effective policy and decision making for enhanced sustainable development outcomes.

* E/C.20/2014/1.

I. Introduction

1. The Rio+20 outcome document, “The Future We Want,” recognized the importance of “reliable geospatial information” in the context of sustainable development. At its second session, held in August 2012, the Committee of Experts on Global Geospatial Information Management decided to establish a new working group to consider and progress this outcome.

2. At its third session, held in July 2013, the Committee of Experts discussed the report prepared by the Global Map for Sustainable Development (GM4SD) Working Group and requested the Working Group to consider the following in its decision 3/103 (E/2013/46; E/C.20/2013/17):
 - (a) To develop a closer working relationship between GM4SD and the International Steering Committee for Global Mapping (ISCGM) with the latter playing a central operating role; and
 - (b) To report to the Committee on the following aspects in the development of a GM4SD:
 - (i) Specifying a narrower focus building on existing standards and regional initiatives;
 - (ii) Providing a clear understanding of the needs and requirements of the sustainable development user community; and
 - (iii) Collaborating with the UN Open Working Group (OWG) on Sustainable Development Goals (SDGs).

The Committee also urged the Member States to participate in and contribute to the GM4SD Working Group in its activities.

3. The present report describes the activities of the Working Group in response to the request made by the Committee at the third session, including the summary and outcomes of the Chengdu Forum, the activities in the context of the Open Working Group (OWG) on Sustainable Development Goals (SDGs), the Third World Conference on Disaster Risk Reduction (WCDRR), and the High-Level Political Forum (HLPF) on Sustainable Development, and the collaboration with ISCGM. Points for discussion and decision are provided in paragraph 26.

II. Chengdu Forum

4. The Chengdu Forum on United Nations Global Geospatial Information Management coordinated and convened by the Secretariat of the United Nations initiative on Global Geospatial Information Management (UN-GGIM) and the National Administration of Surveying, Mapping and Geoinformation (NASG) of China, under the theme, “Development and Applications in Urban Hazard Mapping”, was successfully held on 15-17 October 2013 in Chengdu, China. The Forum, which was initially planned for 24-26 April 2013, had to be rescheduled due to the 7.0 magnitude earthquake that took place on 20 April near the planned venue. The Forum was attended by more than 180 experts from

40 countries (<http://ggim.un.org/Chengdu%20Forum.html>). Participants shared experiences and methodologies in the production, management, analysis, modeling and dissemination capacity of hazard-related geospatial information.

5. The presentations and discussions in the Chengdu Forum strongly supported the fact that geospatial information is indispensable in all phases of disaster risk reduction and response in the world, where the number and severity of disasters appear to be increasing due to factors such as climate change and rapid urbanization. In addition, it was highlighted that the effective use of geospatial information not only helps timely responses to disasters, but also accelerates the development of spatial data infrastructures, which in turn enables society to be better prepared for future hazards. It was also acknowledged that national geospatial information authorities have an important role to play and have a responsibility for rapidly providing reliable geospatial information. Utilizing the latest geospatial information technologies, including analysis using geospatial information derived from satellites and unmanned aerial vehicles, can provide useful decision making information. Acknowledging the realities that many decision makers and disaster managers still do not understand the value and role of geospatial information, building capacity was identified as a major requirement if the potential of geospatial information management is to be fully realized.

6. The Forum concluded that geospatial information has a vital role to play in all phases of hazard and disaster risk reduction. This requires all nations to map not only their basic geography but also to pay special attention to mapping in those areas that are especially vulnerable to natural hazards, especially in urban environments where the risk to both infrastructure and human life can be very high. A major conclusion of the Forum was that global geospatial information experts should consider how they can contribute to the post-2015 development agenda, particularly in the areas of disaster risk reduction, sustainable development, and the global trend towards urbanization. The Forum also concluded that geospatial information, including mapping, appropriate to the multifaceted challenges of urban hazards and disaster mitigation and management should be a key use case in the development of a GM4SD by UN-GGIM.

7. In view of these recommendations, the Working Group, in close cooperation with the UN-GGIM Secretariat, sought an opportunity to address the importance of geospatial information in the area of disaster risk reduction in order to contribute to the post-2015 development agenda, the result of which is reported in subsequent sections of this report.

III. Collaboration with the Open Working Group on Sustainable Development Goals

8. The United Nations Conference on Sustainable Development (Rio+20), held in Rio de Janeiro in June 2012, decided to launch a process to develop a set of Sustainable Development Goals (SDGs), which will be consistent with and integrated into the post-2015 development agenda.

9. Subsequently, the UN General Assembly established an Open Working Group (OWG) on Sustainable Development Goals (SDGs) in January 2013 with a mandate to undertake

an inclusive and transparent intergovernmental process that is open to all stakeholders to develop the SDGs. The Open Working Group initiated a series of sessions in March 2013 by involving relevant stakeholders and experts from civil society, the scientific community and the United Nations system in its work, to provide a diversity of perspectives and experience.

10. In this connection, at its third session the Committee of Experts requested the GM4SD Working Group to collaborate with the Open Working Group in order to better understand the needs and requirements of the sustainable development user community. This required the GM4SD Working Group to consider the needs of the sustainable development user community and to inform them of the importance of employing geospatial information for sustainable development through discussions supported with examples of successful geospatial applications. The Working Group can benefit from already existing work done such as the work presented during the second session of the Committee of Experts in the agenda item, Contribution of the Committee to the United Nations Conference on Sustainable Development (Rio+20) and implications of the outcomes of the Conference. The background document, “Monitoring Sustainable Development: Contribution of Geospatial Information to the Rio+20 Processes,” prepared by the UN-GGIM Secretariat provided the latest geospatial technologies and applications of particular relevance to sustainable development goals

(http://ggim.un.org/2nd%20Session/GGIM%20paper%20for%20Rio_Background%20paper_18May%202012.pdf).

11. In an attempt to reach out to the sustainable development community, the Secretariat of UN-GGIM convened a side event on 10 January 2014, during the Seventh Session of the Open Working Group, on ‘The Role of Geospatial Information in Measuring and Monitoring the Sustainable Development Goals: Disaster risk reduction, sustainable development, and global urbanization’ (<http://ggim.un.org/OWG.html>). The side event included presentations from the members of the GM4SD Working Group (China, Japan, Mexico and United States of America) and addressed the critical role that geospatial information plays, including key references to the Chengdu Forum, in measuring and monitoring the post-2015 development agenda, particularly in disaster risk reduction and urbanization. The presentations were followed by fruitful and open discussion.

12. Through a consultative process, the Open Working Group has now identified 17 focus areas for the Group, in order to develop a specific set of goals and targets for the SDGs (<http://sustainabledevelopment.un.org/owg.html>). While this process reflects the needs of the sustainable development community, it has no direct reference to geospatial information. The role of geospatial information outlined in the Rio+20 outcome document, may not have been fully understood and appreciated by policy-makers. Therefore, it is important for the national geospatial information authorities in the Member States to establish a sustained more effective communication channel with the policy-makers in their respective governments, and provide them with material that helps them appreciate how geospatial information can contribute both to the development of sustainable development goals in these focus areas and monitoring of the progress made. Much of the material required to do this already exists, prepared by the geospatial community in the past as user case study slides, stored in the UN-GGIM knowledge-base (<http://ggim.un.org/knowledgebase/>) as well as the aforementioned background document. It would be useful to customize these materials by the inclusion of local examples

appropriate to each national situation.

13. In order to encourage the Member States' participation in and their contribution to the Working Group activities in line with decision 3/103, a letter from the Working Group Chair was sent on 12 November 2013 by the UN-GGIM Secretariat to all Member States, inviting their views and input to the presentations of the Working Group at a future side event of the Open Working Group. A total of six countries (Bangladesh, Brazil, Egypt, Georgia, Mexico and The Netherlands) sent their input back to the Working Group Chair, and these were subsequently shared with the Working Group members.

14. These contributions provided information on datasets and applications relevant to GM4SD, as well as valuable suggestions for the side event presentations, including the importance of considering user needs and economic benefits in geospatial information management, and of enhancing the capacity of the Member States. It is notable that most responses referred, either explicitly or implicitly, to the importance of national spatial data infrastructure (NSDI) in the furtherance of GM4SD.

IV. High-level Political Forum on Sustainable Development (HLPF)

15. The United Nations High-level Political Forum on Sustainable Development was created at the Rio+20 Conference to provide political leadership and recommendations for sustainable development. This forum replaced the Commission on Sustainable Development (CSD). A second meeting of the High-level Political Forum on Sustainable Development is scheduled from 30 June through 9 July 2014 with a ministerial meeting planned for 7 to 9 July 2014. This meeting is convened by the President of the Economic and Social Council, and the thematic focus will be "Achieving the Millennium Development Goals and charting the way for an ambitious post-2015 development agenda, including the sustainable development goals".

16. During the Ministerial Dialogue Segment in the session of "Charting Pathways for the Future We Want", China will share its aspirations of using geospatial information as a tool for their national development and environmental strategy, including their sustainable development strategy in implementing the first National Geographic Census to understand its physical and social geospatial status to provide development trend analysis and authoritative geospatial information to support decision making.

V. Collaboration with World Conference on Disaster Risk Reduction (WCDRR) organized by United Nations International Strategy for Disaster Reduction (UNISDR)

17. The Hyogo Framework for Action (HFA), a plan to reduce disaster risks in the world and adopted at the 2005 World Disaster Reduction Conference held by the United Nations International Strategy for Disaster Reduction (UNISDR), has been under review for the

post-HFA framework that is to be adopted at the third World Conference on Disaster Risk Reduction to be held in March 2015 as a successor guideline. Given that the outcome document of Rio+20 recognized the importance of reliable geospatial information for disaster risk reduction, it is important that the usefulness of geospatial information should also be adequately recognized in the post-HFA framework. However, the progress report of the United Nations Secretary-General to the United Nations General Assembly on the Implementation of the International Strategy for Disaster Reduction (A/RES/68/320) does not clearly acknowledge the importance of geospatial information.

18. For example, in order to improve the resilience of growing vulnerable urban areas against natural disasters, the UNISDR web site posts the “10 Essentials for Making Cities Resilient.” While one of the essentials refers to the use of geographic information system in mapping hazards, vulnerabilities, etc., it appears that it is taken for granted that up-to-date, reliable base maps are always available in the world. However, that is not necessarily the case in reality. Reliable base maps still need to be developed and frequently updated in many regions in the world, particularly in coastal areas with growing urbanization, where the integration of land and marine geospatial information in a seamless, interoperable and holistic way is also critically important, as agreed at the third session of the Committee of Experts. In light of this and the outcomes of the Chengdu Forum, the members of the Committee of Experts need to reach out to policy-makers on disaster risk reduction in their respective countries so that the post-HFA framework and post-2015 development agenda will take due consideration of the underpinning role of land and marine geospatial information. In this context, the need to ensure the availability of the appropriate data, and the lack of effective linkages between land and marine data in many national spatial data infrastructures, also needs to be addressed.

VI. Collaboration with ISCGM and the role of GM4SD Working Group

19. Decision 3/103 requested the GM4SD Working Group to develop “a closer working relationship between the Working Group and ISCGM, with the latter playing a central operating role.” In order to follow up on this decision, the Chair of the Working Group initiated discussions with ISCGM to clarify what ISCGM plans to do in “playing a central operating role” in support of the work of GM4SD.

20. Following the United Nations Conference on Environment and Development held in 1992 in Rio de Janeiro, Brazil, Japan began to advocate the Global Mapping concept which subsequently led to the creation of ISCGM, of which an active Secretariat has been funded by the Japanese Government. The ISCGM has a long, proud history of over 23 years of successfully working with Member States and is an established entity with a globally recognized mandate. The ISCGM Secretariat, under the new leadership and in light of decision 3/103, started its consideration on the new direction of its activities, in addition to the traditional role in developing 8 thematic layer of Global Map prepared at a scale of 1:1,000,000 with standardized specifications. To-date, 118 countries and regions have contributed data to this Global Map initiative.

21. In view of the need to involve broader perspectives in this consideration, ISCGM has invited experts from the public, private and academic sectors to discuss its future direction

and work programme at its meeting that will be held on 5 August 2014 back-to-back with the fourth session of the Committee of Experts. The outcomes of this meeting will be reported to the fourth session together with the GM4SD Working Group activities. In addition, in an attempt to contribute to the discussion on sustainable development, as well as follow-up on decision 3/103 that advised GM4SD to specify “a narrower focus building on existing standards and regional initiatives”, the ISCGM Secretariat has started developing a prototype web site that provides a catalogue service of global map thematic layers and a prototype web platform for urban hazard maps, with the intention of presenting it at the ISCGM meeting.

22. The GM4SD Working Group is a body created by UN-GGIM as a mechanism to solicit inputs from the Member States as the United Nations seeks to develop its sustainable development agenda. This Working Group aims to provide professional guidance to global sustainable development discussions initiated by the United Nations in the use and production of relevant geospatial information. The Working Group is supported by the UN-GGIM Secretariat, whilst the ISCGM focuses on specific outputs such as the Global Map data and its specification development. Unlike the Working Group, ISCGM has no direct involvement in the discussions on sustainable development in the context of the United Nations. However, ISCGM notes the opportunity to provide a potential operational supporting role to the Working Group. ISCGM’s new direction and role will be discussed at length in its forthcoming 21st meeting in August 2014.

23. With regard to the advisory role of the GM4SD Working Group, decision 3/103 emphasized the importance of working more closely with the sustainable development community, including the Open Working Group. The Working Group has therefore shifted its focus towards understanding the ongoing activities and needs of the sustainable development community to make global mapping and related activities useful for the global sustainable development agenda. This shift of focus is timely and important for the Committee of Experts, since the current discussions in the United Nations on the development of SDGs for the post-2015 development agenda does not appear to clearly acknowledge the importance of geospatial information. The Working Group, on behalf of the geospatial community, needs to reach out to the sustainable development community so that geospatial information will be a key component for defining, managing and monitoring the SDGs and associated progress.

24. Since the third WCDRR is scheduled to be held in March 2015, and experts at the Chengdu Forum have already reaffirmed the relevance and important contribution of geospatial information to disaster risk reduction, the Working Group will have an excellent opportunity to send a strong message to policy-makers aligned to the disaster management community. Therefore, it will be an important role of the Working Group, on behalf of the global geospatial community, to participate in the WCDRR and provide expert guidance for the post-HFA framework. The results of these outreach activities should be reported back to the Committee of Experts to provide guidance and direction for the future activities of the Committee.

VII. Planned activities

25. The Working Group plans to continue its effort to work closely with ISCGM based on the outcomes of ISCGM's 21st meeting in August 2014 in New York and the user needs identified through the collaboration with Open Working Group, High-level Political Forum on Sustainable Development and the Third World Conference on Disaster Risk Reduction to contribute to the development of a GM4SD. The Working Group also plans to revise and update the selected slides of user case studies in cooperation with the UN-GGIM members so that the members will be able to reach out to policy-makers on sustainable development and disaster risk reduction in their respective countries to showcase the importance of geospatial information in developing the post-2015 development agenda. In addition, the Working Group will seek to participate in the Third World Conference on Disaster Risk Reduction to contribute to the post-HFA development process.

VIII. Points for discussion

26. **The Committee is invited to:**

(a) Approve the roles of the Working Group and ISCGM for the development of a GM4SD;

(b) Encourage Member States to establish a more effective communication channel with policy and decision makers in their respective governments, including providing them with materials that illustrate how geospatial information can contribute to the sustainable development goals and to the monitoring of the progress made in the context of the post-2015 agenda;

(c) Continue monitoring the discussions taking place in the various sustainable development fora, including the determination of the SDGs that can be translated and operationalized from a geospatial perspective;

(d) Provide guidance on the activities of the Working Group in contributing to the OWG, WCDRR and post-2015 development agenda.