

UNITED NATIONS SECRETARIAT Department of Economic and Social Affairs Statistics Division

September 2016

UN-GGIM International Forum on Geospatial Information and Services for Disasters

Hilton Hotel, Bridgetown, Barbados 4-5 and 8 September 2016

SUMMARY REPORT

A. Background

1. The creation of the Working Group on Geospatial Information and Services for Disasters WG-GIS4D was borne out of a series of decisions taken by the UN-GGIM Bureau beginning in 2015. The Bureau recognised that increasingly the international community was being faced with the need to respond to crisis - disease outbreaks, earthquakes, flooding etc. In order to support the response to such events and undertake decision-making, situational awareness, planning, remote monitoring and surveillance there is the need to provide in a coordinated manner, timely and accurate geospatial data, products and services. A study was therefore commissioned which the objective to improve geospatial information policy, processes and services for emergency response. It examined technical and management aspects of geospatial information services provision and coordination mechanisms among United Nations emergency response stakeholders. This report was presented to the Committee of Experts at its fifth session and decision 5/110, (E/2015/46-E/C.20/2015/17) was then adopted to establish a working group to further develop and implement a strategic framework. It was agreed that the strategic framework should be:

- a. Focused in a practical manner;
- b. Aligned with the outcome and follow-up to the Sendai Framework for Disaster Risk Reduction 2015-2030 and its implementation;
- c. Able to take into consideration the special needs of developing countries, especially with respect to capacity building and sharing knowledge and;
- d. Broadly representative of different regions of the world and taking into account regional experiences;

2. At its 6th Session the Committee of Experts by decision 6/110, report (E/2016/46-E/C.20/2016/15) welcomed the report and draft strategic framework on geospatial information and services for disasters 2016-2030 document and acknowledged the five priorities for action. The Committee of Experts further supported the work of the WG-GIS4D, and welcomed their efforts to convene an international forum on Geospatial Information and Services for Disasters in Barbados in September 2016 and in Kunming, China in May 2017.

3. The UN-GGIM Secretariat in collaboration with the Government of Mexico through the Mexican Agency for International Development Cooperation (AMEXCID) and the National Institute of Statistics and Geography (INEGI), the Ministry of National Assets of Chile and the Urban and Regional Information Systems Association (URISA) convened the UN-GGIM International Forum on Geospatial Information and Services for Disasters, from, 4-5 and 8 September 2016, in conjunction with the 8th URISA Caribbean GIS Conference in Bridgetown Barbados 5-8 September 2016. The forum was attended by 46 experts from 20 national agencies and 13 international organisations. The list of participants is available at Annex I. The first two days of the forum, 4-5 September discussed substantive issues covering the review of the Strategic Framework; experiences, practices, approaches and challenges before, during and after disasters; potential areas of collaboration between the UN-GGIM Framework, Sendai Framework and the 2030 Agenda for Sustainable Development and the future we want. On the final day of the Forum, Wednesday, 8 September the WG-GIS4D reviewed updates for the Strategic Framework, updated the draft Resolution and decided on the working group's next steps. The agenda is available at the Forum Website http://ggim.un.org/Barbados%20Disaster%20Forum.html.

4. The objectives of the forum included the provision of a platform for discussing the means and methods of implementing the strategic framework; and sharing experiences in the areas of best practices and approaches from various decision-making levels; humanitarian response experiences; and future challenges and trends in support of the framework's implementation.

B. Opening Ceremony

5. The opening ceremony was moderated by Mr. Rohan Richards, Co-Chair of the WG-GIS4D. Hon. Ambassador Jesús A. López González, Ambassador of Mexico in Trinidad & Tobago, Mr. Rolando Ocampo, Co-Chair UN-GGIM, and Vice President of National Institute of Statistics and Geography (INEGI), Mexico, Mr. Peter Tiangco, Co-Chair WG-GIS4D, and Administrator of the National Mapping and Resource Information Agency, Philippines and Ms. Valrie Grant, President, URISA Caribbean Chapter delivered welcome remarks. The forum was officially opened by the Honourable Denis Kelman, Member of Parliament and Minister of Housing, Lands and Rural Development, Barbados. Minister Kelman affirmed his country's ongoing commitment to the United Nations and acknowledged the fact that small island states and its peoples are vulnerable to the impact of disasters which supported the need for regional planning. He shared that, "There must be a commitment from all stakeholders to ensure the accessibility of good quality geospatial data from authoritative sources to underpin decision making for disaster management specialists. Your work provides the platform for linking information, which is vital to the management of our environment, and priceless in the integration of the social, economic and financial components of our regional economies. When we do this well, we achieve sustainable development."

C. Discussion Sessions

Session One: "The 2016-2030 Strategic Framework on Geospatial Information and Services for Disasters":

6. The Co-chairs presented fact finding analysis and a review of frameworks, laws, rules and policies relevant to disaster management. This information was used to formulate and prepare the Strategic Framework. Five priorities for action, to better guide the Members States in the implementation of the framework were proposed: governance and policies; awareness and capacity building; data management; common infrastructure and services; and resource mobilization. Participants also discussed implementation of each priority for the Member States.

Session Two A "Experiences, practices, approaches and challenges in implementing the strategic framework (Before Disasters)":

7. The representatives of Jamaica and Chile presented examples of integration of hazard and risk assessment and geospatial infrastructure preparedness into national plans and policies on

national and local levels. The representative of Mexico presented a best practices case study of preparedness in response to Hurricane Patricia. The representative of the Humanitarian OpenStreetMap Team provided examples of engaging crowdsourced/volunteer geospatial information to fill the gaps in geospatial datasets. The representative of the World Bank stressed the importance of presenting a comprehensive risk assessment in order to request financial and technical assistance from international funding institutions.

Session Two B: "Experiences, practices, approaches and challenges in implementing the strategic framework (During Disasters)":

8. The representative of the Humanitarian OpenStreetMap Team (HOT) provided examples of their response during disasters. Examples were given of HOT response during the Ebola response. The HOT representative asked for clarification of what is considered "authoritative" data. The representative of the Association of Caribbean States presented actions that should be considered during disasters, including information and data sharing, security, relief, provision of food items, rehabilitation of public services and Emergency Operations Centre. The Mexican representative provided information related to the procedures and protocols on information sharing through INEGI inter-offices collaboration during the disaster. He also presented a website for collaboration and data sharing for disaster response. The representative of China provided a briefing on the Sichuan Surveying and Mapping Emergency System and coordination procedures at the Sichuan Emergency command center.

Session Two C: "Experiences, practices, approaches and challenges in implementing the strategic framework (After Disasters)":

9. The representative of Chile provided an overview on geospatial information management during the post-disaster stage. The representative of Jamaica presented their disaster response mechanism called "National Emergency Response Geographic Information Systems Team" (NERGIST). This framework is used to collect damage assessment information and data. The representative from Barbados spoke on their national damage assessment and analysis after disasters. The participants stressed the importance of establishing a common ground amongst different partners involved in the post-disaster stage, building trust and collaboration.

Session Three: "Strategic Framework on Geospatial Information and Services for Disasters 2016-2030: Potential Area for Collaboration":

10. Both Co-Chairs presented their views on potential areas for collaboration on national and international levels, which included the 2030 Agenda for Sustainable Development-Sustainable Development Goals (SDGs) and the Sendai Framework for Disaster Risk Reduction 2015-2030. The representative of the Open Geospatial Consortium made a presentation on community engagement and collaboration. The participants indicated that GIS technology and geospatial data play an important role in cross-cutting issues, such as identifying priorities and implementation of common standards.

11. The representative of the Secretariat briefed the participants on the preparations for upcoming forums:- International Forum on Disasters in Kunming, China in 2017, and discussed

WG-GIS4D's participation in the 2017 Global Platform for Disaster Risk Reduction, in May 2017, Cancun, Mexico. The importance of representation of the Working Group and its participation in the forums was emphasized.

Session Four: "The Future We Want":

12. Both Co-Chairs presented their views on the next steps to be taken for successfully adopting and implementing the Strategic Framework on Geospatial Information and Services for Disasters 2016-2030.

13. The panellists engaged in very enriching discussions and made valuable observations and recommendations. Some of which are as follows:

- a. Recognition of the need to understand risk and develop risk maps and plans and for this to be done good geospatial information (exposure and vulnerability) and a common standard for conveying hazard information are needed.
- b. Supported the need for Member States to conduct risk assessments which would inform mitigation actions.
- c. Having access to geospatial data was cited as essential to support disaster risk reduction and implementation and monitoring of the SDG targets. From the Second Administrative Level Boundaries (SALB) project -administrative boundaries; Statistical Offices e.g. population, gender and age and core Mapping Agencies (core datasets, geodetic networks).
- d. Called upon UN-GGIM to do what they can to make the second administrative level boundary dataset available and shared with the global community.
- e. Identified the need to create trust among the disaster risk reduction community to engender information sharing, creation of standards and implementation of quality control measures.
- f. Noted that risk communication was the least tackled area of disaster risk reduction and encouraged the WG-GIS4D to examine this topic.

14. The participants expressed their satisfaction with the work done, the outputs, and the objectives of the WG-GIS4D. There was overall recognition that the Strategic Framework on Geospatial Information and Services for Disasters 2016-2060 is a good document and participants generally expressed their support to have the document adopted. The participants also identified the importance of the role of the UN-GGIM Regional Committees in communicating the importance of the framework; identifying champions; and monitoring of the framework implementation in their respective Member States.

15. In concluding the Co-Chairs summarized the outcome of the forum and the working group meeting and thanked the participants for their participation.

D. Next Steps

- 16. At its meeting on Thursday 8 September the Working Group agreed on the following:
 - a. Amendment to the strategic framework to include roles of the global and regional organizations in further implementation and the placement of 'disaster management and risk reduction processes in long term planning' in the Strategic Framework.
 - b. It was noted that successful implementation of the strategic framework will be achieved in consideration of the following :
 - Implementation,
 - Outreach activities, and
 - Political recognition and other related agreements
 - c. **It was further agreed that** all Member States should readily conduct their own assessments and capabilities in implementing the framework. Likewise, Member States can also prepare a national roadmap to elaborate their implementation plans.

d. WG-GIS4D Activity Time Line

- (i) Final Strategic Framework to be shared with the group along with the draft Resolution
- (ii) Presentation to the UN-GGIM Bureau in 2016
- (iii) At least two (2) Global Consultations
- (iv) Presentation of Strategic Framework at Seventh Session of UN-GGIM
- (v) ECOSOC making the final resolution approved by early 2018

e. Specific Tasks:

- (i) The first draft of the Resolution is to be prepared for the forthcoming UN-GGIM AP Meeting in Kuala Lumpur, Malaysia in October 2016.
- (ii) The draft resolution is to be uploaded into the WG-GIS4D Google Drive for comments by the Member States at the soonest.
- (iii) For UNISDR's Global Risk Platform event, the WG should design a concept paper detailing its involvement in the forum. The synergy between the strategic framework and other international agreements (2030 Agenda, Sendai Framework) can be considered as a focus area. The actual application in the case of Mexico can also be included in the presentations. As such, the Government of Mexico shall serve as the focal point for the said event.
- (iv) The WG-GIS4D's 2016 Work Plan is to be revised to include presentations of the Strategic Framework in the UN-GGIM AP Meeting in October 2016, Malaysia and the UN-GGIM Americas Meeting in October 2016, Mexico.
- (v) The 2017 Work Plan should be prepared, and shall include presentations in the forthcoming UNISDR's Global Risk Platform event, May 2017 and the Kunming Forum, May 2017.
- (vi) The Philippines is planning to hold a workshop by early 2017 regarding national implementation of the draft Strategic Framework.

Annex 1

List of Participants

UN-GGIM Working Group Meeting on Geospatial and Services for Disasters 4 -5 and 8 September 2016 Bridgetown, Barbados

Antigua and Barbuda

1. Mr. Andrew Nurse, Mapping and Survey Division, Ministry of Agriculture, Lands, Fisheries and Barbuda Affairs

Barbados

- 2. Mr. Owyng Harewood, Deputy Director, Department of Emergency
- 3. Hon, Minister Denis Kelman, Minister of Housing, Lands and Rural Development
- 4. Mr. Leandre Murrell-Forde, Barbados Lands & Surveys Department
- 5. Ms. Michelle St. Clair, Barbados Lands & Surveys Department

Chile

6. Mr. Alvaro Monett, Executive Secretary, SNIT, Chile

Cuba

7. Mr. Candido Alfredo Regalado Gómez, Jefe de la Oficina Nacional de Hidrografía y Geodesia

Bahamas

- 8. Mr. Duane Miller, National Geographic Information Systems Centre for Geographic Information Systems
- 9. Ms. Antonique Sirachan, National Geographic Information Systems Centre for Geographic Information Systems

British Virgin Islands, Tortola

10. Ms. Stacy-Ann Austin, Department of Risk Management

China

11. Ms. Quanhong Zheng, Head of GeoDatabase Department, Suchuan Geomatics Center, NASG

Commonwealth of Dominica

12. Mr. Marcus Lestrade, Lands and Surveys Division

Guyana

13. Mr. Kellon Phillips

Jamaica

14. Mr. Rohan Richards, Co-Chair WG Disasters and Principal Director, Ministry of Water, Land, Environment & Climate Change

- 15. Mr. Mark Codling, GIS Infrastructure Manager, National Spatial Data Management Division,
- 16. Ms. Jacqueline daCosta, Land Information Council of Jamaica

Mexico

- 17. Mr. Rolando Ocampo, Co-Chair UN-GGIM and Vice President, National Institute of Statistics and Geography (INEGI)
- 18. Mr. Francisco Jimenez Nava, Deputy Director General, Natural Resources and Environment National Institute of Statistics and Geography (INEGI)
- 19. Mr. Carlos M. Valdes Gonzalez, Director General, National Center for Disaster Prevention
- 20. Ms. Gabriela Seco, Department of Planning and Projects, INEGI

Philippines

- 21. Mr. Annrou R. Ramos, National Mapping & Resource Information Agency (NAMRIA)
- 22. Mr. John Fabic, Director, Information Management Department, National Mapping & Resource Information Agency
- 23. Mr. Efren Carandang, Deputy Administrator, National Mapping & Resource Information Agency
- 24. Mr. Peter Tiangco, Co-Chair WG-Disaster, Administrator, National Mapping & Resource Information Agency

Saint Kitts & Nevis

25. Mr. Austin Jay Farler

Saint Lucia

26. Mr. Hildreth M. Lewis, Department of Planning

Sint Maarten

27. Mr. Louis Brown, Chair, Working Group on Geospatial Information for Climate Change and Disaster, UN-GGIM Americas

Saint Vincent

28. Mr. Corliss Murray

Sweden

29. Mr. Dan Ekstrom, Lantmateret

Trinidad and Tobago

30. Ms. Carlene Boodoo

Turks & Caicos

31. Mr. Mike Cleveraux

United Kingdom

32. Ms. Catherine Seale, United Kingdom Hydrographic Office

GeoOrbis

1. Mr. Craig Batstone

OGC

2. Mr. Scott Simmons, Executive Director of the Standards Program

URISA Caribbean

3. Ms. Valrie Grant, President

GeoTechVision - Jamaica

- 4. Ms. Sheree Cameron
- 5. Ms. Cadeen Brown

Humanitarian OpenStreetMap Team (HOT)

6. Mr. Tyler Radford, Executive Director

World Bank

7. Dr. Keiko Saito, Disaster Risk Management Specialist, GFDRR

Association of Caribbean States

8. Mr. Arturo López Portillo, Director of Transport and Disaster Risk Reduction

CDEMA

9. Mr. Ronald Jackson, Executive Director

MapAction

10. Mr. Alan Mills

University of West Indies

11. Mr. Bheshem Ramlal, Head of Department of Geomatics Engineering & Land Management

United Nations Office for the Coordination of Humanitarian Affairs (OCHA)

12. Mr. Craig Williams, Chief, Field Information Services, UN-OCHA (via Web-ex)

United Nations Office for Disaster Risk Reduction (UNISDR)

13. Mr. Neil McFarlane, Chief UNISDR New York Liaison Office (via Web-Ex)

14. Mr. Julio Serje, Risk Knowledge Section, UNISDR (via Web-Ex)

UN-GGIM Secretariat

15. Ms. Cecille Blake, Statistics Division, DESA

- 16. Mr. Kyong-Soo Eom, Chief of UNGIS
- 17. Mr. Timur Obukhov, Geospatial Information Officer, UNGIS