Chengdu Forum on UN-GGIM
Global Map for Sustainable Development:
Development and Applications in Urban Hazard Mapping
Chengdu, Sichuan Province, China
15 – 17 October 2013

Provisional Annotated Agenda – 16 August 2013

Background:

The United Nations initiative on Global Geospatial Information Management (UN-GGIM), established through ECOSOC in July 2011, aims at playing a leading role in setting the agenda for the development of global geospatial information and to promote its use to address key global challenges. It provides a forum for coordination and dialogue among Member States, and between Member States and relevant international organizations.

The United Nations Conference on Sustainable Development (Rio+20) outcome document "The future we want" urged Governments and organizations to commit to disaster risk reduction in order to enhance the resilience of cities and communities to disasters. Further, in its 2012 report on Key Indicators for Asia and Pacific, the Asian Development Bank noted that Asia, home to almost half of the global urban population, is urbanizing faster than any other region, resulting in an unprecedented growth in densely populated megacities. It points out in particular the growing vulnerability to natural disasters, and the need for information and appropriate mitigation strategies.

The Doha Declaration (6 February 2013) affirmed the importance of having a stable, credible, and reliable national geospatial information infrastructure in each country built on internationally recognized standards that will integrate, manage, and deliver geospatial information for timely, evidence based and authoritative decision making and policy formulation on location-based development issues, including disasters and humanitarian needs.

The Secretariat of UN-GGIM and the National Administration of Surveying, Mapping and Geoinformation of China (NASG) are jointly organizing the Chengdu Forum on UN-GGIM to be held in Chengdu, China from 15 to 17 October 2013. With the theme Development and Applications in Urban Hazard Mapping, the Forum will provide a platform for discussing priority issues related to the development and provision of consistent geospatial information and modeling techniques to enable nations to better understand and implement natural hazard impact mapping and analysis in urban environments. In particular, the Forum will engage with leading experts to share experiences and methodologies in the production, management, analysis, modeling and dissemination capacity of hazard related geospatial information.

Forum Outcomes:

The forum will consider natural hazard impact analysis data requirements, integration techniques, and analytical modeling applications for a range of natural hazard phenomena. It will also consider the following types of fundamental geo-information as key inputs to the hazard and risk assessment process: framework geospatial datasets; natural hazards phenomena; exposure information; and vulnerability to particular hazards.

The following outcomes are envisaged:

1. A recognition that geospatial information has a vital role to play in all phases of hazard and disaster risk management and reduction, and that it extends the ability for nations to not only map their geography and topography, but also those areas that are vulnerable to natural hazards, particular in urban environments;
2. An emerging understanding of the key issues and means to develop data requirements (inputs) and modeling capabilities from multiple sources of information to meet end users needs for urban hazard and risk mapping; and
3. Agreement on urban hazard and disaster mapping as a key input into the development of a roadmap for a Global Map for Sustainable Development (GM4SD) by UN-GGIM.

Tuesday, 15 October

Opening Ceremony:

The Forum will be opened by Mr. Xu Deming, Vice Minister, Ministry of Land and Resources; Director General, National Administration of Surveying, Mapping and Geoinformation (NASG) of China, and the Under-Secretary-General for the United Nations Department of Economic and Social Affairs, Mr. Wu Hongbo. Welcoming addresses will be made by senior Chinese officials, including Mr. Wei Hong, Governor, People's Government of Sichuan Province of China.

Dr Li Pengde, Deputy Director General, NASG of China, will Chair the Opening Ceremony.

National Address: Development and Applications of Emergency Mapping in China

The National Administration of Surveying, Mapping and Geoinformation of China (NASG) is on a rapid geospatial development program to meet its expanded requirements within China and the region. This national presentation will focus on recent and anticipated developments for, and applications of, emergency mapping in China.

This National Address will be delivered by Dr Li Pengde, Deputy Director General, NASG of China.

Mr. Stefan Schweinfest, Acting Director, United Nations Statistics Division, will Chair the National Address.

Keynote Address: Delivering Reliable Geospatial Data During Emergencies, and Approaches to Urban Hazard Mapping

To set the context for the Forum, two invited keynote presentations will be delivered by recognized global experts. They will demonstrate the real challenges in harnessing and delivering geospatial information during large-scale emergencies in urban environments, and will discuss the issues and challenges associated with rapid urban development and growth with particular regard to vulnerability from natural hazards that lead to disasters. In exploring some of the trends and requirements for sustainable disaster risk reduction the presenters will explore methodological approaches to urban hazard mitigation, including mapping, modeling and analysis.

Session 1: Understanding Urban Hazard and Risk Processes

This session will provide international perspectives and understanding of urban hazard and risk terminologies and processes, and how they may be applied. Although hazards are relatively easy to understand – earthquakes, tsunamis, floods, typhoons, and so on – the frequency, likelihood, or risk of them occurring and impacting on urban environments is much harder to understand and demonstrate. Disaster risk reduction programs aim to reduce the vulnerability (and enhance the resilience) of communities to the adverse effects of natural hazards. A key step in reducing vulnerability is the development and delivery of natural hazard impact and risk information and mapping.

Session 2: Hazard and Risk Modeling Applications

This session will provide presentations from several regional hazard and risk modeling applications and centers of excellence that are linking science, information, and technology to support evidence-based decision making for urban communities. The presentations will provide an emerging understanding of the key issues and means to develop timely data requirements (inputs) and modeling capabilities (outputs) from multiple sources of information to meet specific end user needs (including societal awareness) for urban hazard and risk mapping.

Wednesday, 16 October

Sessions 3 and 4: Geospatial Challenges in Responding to Urban Disasters

Through recent real-world disaster events, presenters in these sessions will demonstrate the challenges for geospatial agencies when suddenly required to respond to large-scale urban disasters, and the impediments and expectations that were revealed during and following the events. A common thread is the importance of having consistent, reliable, and readily available fundamental geospatial information to support first responders and government agencies in providing an accurate and informative base-map and platform for situational awareness, response, and recovery operations. Examples of lessons learned, and mechanisms put in place to ensure that agencies are better prepared procedurally and institutionally for the future, are also discussed.

Sessions 5 and 6: Hazard and Risk Geospatial Information Requirements
These sessions will discuss in detail the geospatial information requirements for the urban hazard and risk assessment process. There are several phases (and terminologies) relating to any hazard or disaster event – planning, preparedness, prevention, response, assessment and recovery. Understanding, identifying and zoning specific hazards in urban environments is fundamental to generating and disseminating credible information on hazard risks in cities. Such information, when combined with early warning and command and coordination systems, is able to provide proactive planning and response strategies. The availability and accessibility of appropriate framework datasets (e.g. topography, imagery, buildings, infrastructure, and demographics) are critical to the development of a hazard map or any spatial extent of hazards and impact, irrespective of the hazard of interest. These sessions will demonstrate that national geospatial information authorities have an opportunity to not only map their geography and topography, but also those areas that are vulnerable to natural hazards, particular in urban environments. This information is then able to be dynamically maintained, integrated and delivered to urban planners, first responders, decision makers and responsible government agencies when and where required in a seamless and transparent manner.

Thursday, 17 October

Session 7: Developing Geospatial Applications and Methods
This session will discuss a range of geospatial data, applications and methods that are being developed and applied in some Member States to augment disaster risk reduction policies and initiatives. Presenters will share experiences and methodologies in the integration, management, analysis, modeling and dissemination capacity of hazard related geospatial information and mapping that allows decision makers to better visualize and understand hazards and their impacts during exercises, as well as before, during, and after an event.

Session 8: Summary, Outcomes and Actions
This closing session will consist of a moderated panel discussion with the Session Chairs that will review the discussions that have taken place, with a view to summarizing the priority issues and potential next steps in realizing the importance of providing accurate and reliable geospatial information, able to be integrated and disseminated on appropriate platforms to support urban hazard and disaster mapping.