

The Sixth UN-GGIM-AP Plenary Meeting

Progress Report of Working Group 2 on Disaster Risk Management 2016-2017

Kumamoto, Japan
17 October, 2017

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UN-GGIM-AP

Regional Committee of United Nations
Global Geospatial Information Management
for Asia and the Pacific

www.un-ggim-ap.org/

WG2 members

WG2 Chair

Mr. Toru Nagayama, Japan

WG2 Vice Chairs

Dr. Tang Xinming, China

Mr. Adi Rusmanto, Indonesia

Mr. Peyman Baktash, Iran

Ms. Munkhtsetseg Dalkhaa, Mongolia

Mr. Rob Deakin, New Zealand

Mr. John SF Fabic, Philippines



WG2 – Expected outcome

Expected outcome by 2030

NGIAs in Asia-Pacific region will implement necessary disaster risk reduction measures, required by SFDRR, by fully mobilizing their technical and administrative competency. These measures will greatly contribute to reducing casualties and property loss by disasters in the region.

Expected outcome by the end of current WG2 (2015-2018)

Enhance the capability of NGIAs in contributing to disaster risk reduction through utilizing geospatial information, with a view to an effective implementation of SFDRR in Asia-Pacific region.

***SFDRR: Sendai Framework for Disaster Risk Reduction 2015-2030**



Summarized Work Plan of WG2 (2015-2018)

Work Item	Activities	Period	Output
1	Identify NGIAs' contribution areas for effective implementation of the SFDRR.	2015-2018	Contribution list
2	Investigate present and future roles of NGIAs through a questionnaire survey.	2015-2017	Survey report
3	Collect Best Practices (BP)	2015-2017	BP collection
4	Compile a guideline to help NGIAs promote geospatial activities for DRR.	2017-2018	Guideline
5	Coordination and cooperation with the UN-GGIM Working Group on disasters.	2015-2018	(enhanced coordination)
6	Encourage Member States to share earth observations infrastructure, technology and data resources.	2015-2018	(further sharing)



Identifying NGIAs' contribution areas for SFDRR

- ◆ Revised based on WG2 member's comments
- ◆ Scope: NGIAs -> Geospatial Community incl. NGIAs
- ◆ Reference to five priorities of “Strategic Framework”

SFDRR reference & description			GC/ NGIAs' possible contribution	Priorities for Action of SF	Disaster Phase	
Serial number				Strategic Framework	Disaster Phase	
1	1(b)	1	(b)Complete the assessment and review of the implementation of the Hyogo Framework for Action 2005-2015: Building Resilience of Nations and Communities to Disasters;	In view of the fact that the implementation status of Hyogo Framework for Action 2005-2015 has been assessed and reviewed, GC will need to work by imagining how contribution from geospatial information sector, especially from NGIAs will be appreciated when Sendai Framework for Disaster Risk Reduction 2030 will be reviewed.	Priority1: Governance and Policies	1: Before Disaster
2	6	3	...needs to be focused on tackling underlying disaster risk drivers, such as...unplanned and rapid urbanization, poor land management...	Unsustainable use of natural resources as a result of unplanned and rapid urbanization and insufficient land administration will cause disaster risk. Their aggravation can be prevented by administration in understanding the situation using geospatial information provided by GC.	Priority2: Awareness Raising and Capacity Building	1: Before Disaster
3	14	2	...monitoring, assessing and understanding disaster risk...	GC especially NGIAs provide geospatial information for movement and landform information	Priority2: Awareness Raising and Capacity Building	1: Before Disaster
4	14	8	...enhancing multi-hazard early warning systems...	GC can make a platform and provide geospatial information in coordination with relevant organizations to create early warning systems.	Priority2: Awareness Raising and Capacity Building	1: Before Disaster
5	16	6	...the present framework aims to achieve the following outcome over the next 15 years: <i>The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries</i>	GC need to be conscious of how their efforts employed lead to the SFDRR outcome through what kind of value chains to be build.	Priority1: Governance and Policies	1: Before Disaster

Sixty Contribution Areas



Results - Questionnaire Survey

a) Activity

- ◆ Investigation of the present roles of disaster management authorities and NGIAs and identifying potential areas for extended roles of NGIAs and collaborations.

b) Results

- ◆ 14 out of the 56 member states of UN-GGIM-AP responded to the survey.
- ◆ Each NGIA recognizes the provision of precise and real-time geospatial information as a challenge for disaster risk reduction.
- ◆ NGIAs are requesting WG2 to share legal documents and best practices of the member states

c) URL

- <http://www.un-ggim-ap.org/workinggroups/disaster/dblj/201612/P020161227366018769051.pdf>



Results- Best practices

a) Activity

- ◆ Collecting Best Practices on the use of geospatial information for disaster risk reduction in Asia-Pacific region.

b) Results

- ◆ As of October 2017, total 18 Best Practices from 10 countries are summarized to the Final Draft Collection.

c) URL (First Collection of 14 Best Practices)

- <http://www.un-ggim-ap.org/workinggroups/disaster/dblj/201612/P020161227366018769051.pdf>

*WG2 appreciates the contribution of the following member states:
**Australia, Bangladesh, China, Fiji, Hong Kong SAR,
Indonesia, Japan, Malaysia, Philippines, Sri Lanka***

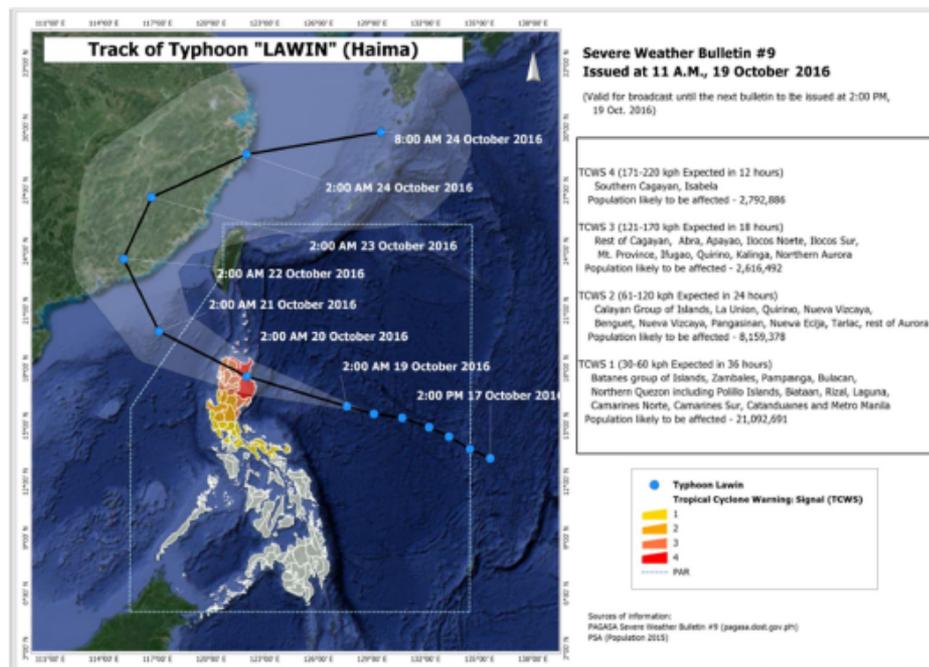


An example- Best practices

Typhoon trajectory mapping by NAMRIA (Philippines)

No.16

Country	Philippines
Organization	National Mapping and Resource Information Authority (NAMRIA)
Title	Mapping of Track of Typhoon Lawin (International Name: Haima) and Affected Areas and Population
Outline of the subject natural disaster	In 19 October 2016, Typhoon Lawin (Haima) classified as extremely dangerous by the state's weather agency affected the provinces in the northern part of the country. As it intensified into a super typhoon, destructive floods and massive landslides were expected to be brought by moderate to heavy rains within its 800-km diameter.
Response	NAMRIA prepared a map layout showing the track of Typhoon Lawin (Haima), the likely affected provinces and population. NAMRIA integrated data from various sources such as Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA) and the Philippine Statistics Authority (PSA). The map was made public via NAMRIA's website for download by other DRR agencies, local government units, and other interested parties.
Effects	The public is able to visualize the track of the typhoon and is made aware of the areas and population likely to be affected by it. This increased awareness of the residents in the likely affected areas to prepare for the impending typhoon.
Future	Strengthen coordination with DRR and other agencies providing statistical data relevant to disaster preparedness.



Map showing the track of Typhoon Lawin and likely affected areas. The map was made available for public download at NAMRIA's website.



Key Findings - Best Practices

- Used NGIAs' data as a material for decision-making
- Provided NGIAs' data to citizens via internet to facilitate evacuation
- Practices targeted local governments for enlightening and capacity building
- Compiled a catalogue of geospatial information to help stakeholders quickly request required information
- Providing geoportal enabling stakeholder to view the situation spatially and to overlay necessary information.
- Future prospects: UAV(Drones) introduction; more efficient data provision; information of vulnerable people in disaster; develop geospatial info. (CORS, topo map DB, DEM)



Compile the Guidelines

a) Objectives

- ◆ To propose practical approaches, efforts, and ideas to help NGIAs in the Asia-Pacific region to strengthen their capabilities in disaster risk reduction.

b) Activity

- ◆ Started early 2017, by examining the approaches for compiling the Guidelines.
- ◆ Drafted the first version of the Guidelines in October 2017.



Compile the Guidelines

c) Contents of the first draft

Chapter 1: Introduction

Chapter 2: The Goal of the guidelines

Chapter 3: NGIA's Approaches to promote geospatial information for disaster risk management

Chapter 4: Collection of cases

Chapter 5: References

Guidelines for Disaster Risk Management Using
Geospatial Information
(First Draft)

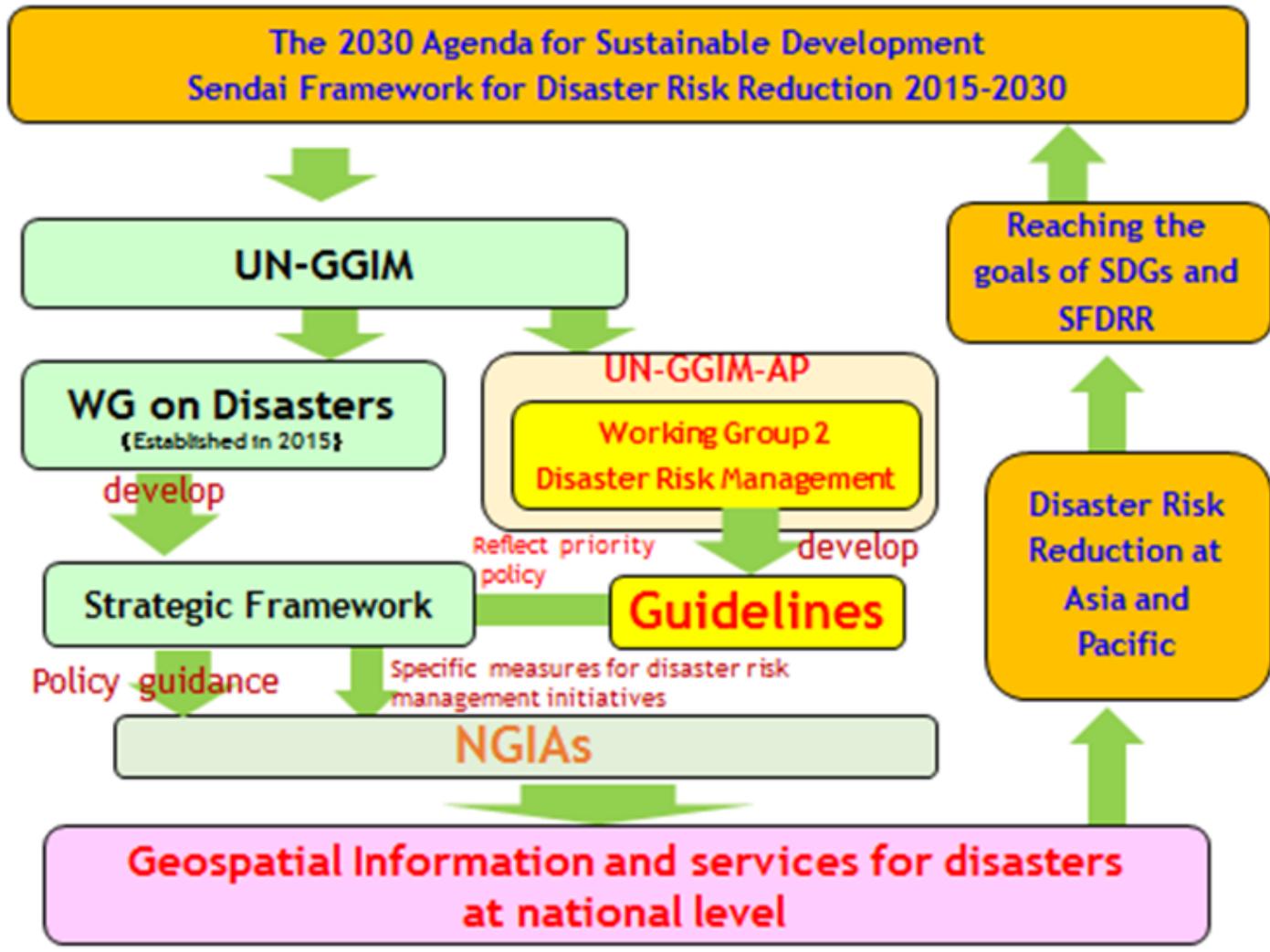


Crater Lake, Mt. Pinatubo, the Philippines

Working Group 2 of
UN-GGIM-AP
(Disaster Risk Management)
October 2017



SF and the Guidelines



Example measures relevance to SF five priorities

- ◆ To ask users' needs of geospatial information for their operation
-> **Priority 1 (Governance and Policies)**
- ◆ School outreach aiming at cultivating future technical experts in terms of publicity and education
-> **Priority 2 (Awareness Raising and Capacity Building)**
- ◆ To establish a system to provide geospatial information (e.g. paper map) to affected areas from NGIAs
-> **Priority 3 (Data Management)**
- ◆ To conduct drills with stakeholders using geospatial information and establish a system for speedy disaster response
-> **Priority 4 (Common Infrastructure and Services)**



Schedule

- ◆ The results of Special Session of this Plenary Meeting and inputs, insights and experiences from WG2 Vice-Chairs and interested members will be incorporated.
- ◆ The final Guidelines will be presented at the Seventh UN-GGIM-AP meeting in 2018.

Expected Outcome of the Guidelines

- ◆ The Guidelines will help NGIAs improve their capacity in the effective uses of geospatial information for DRR.
- ◆ NGIAs will be playing an increasingly important role in contributing to the implementation of the 2030 Agenda for Sustainable Development and SFDRR.



Coordination and Cooperation with the UN-GGIM WG on Disasters

- WG2 shared the Final Report of Questionnaire (item No.2) and the first collection of Best Practices (item No.3) with UN-GGIM WG on Disasters in March 2017.
- Representing UN-GGIM-AP, WG2 Chair made a presentation about the WG2 activities and their linkage to the Strategic Framework at the side event “Geospatial Information and Services for Disasters” of the 7th Session of UN-GGIM on 31 July 2017.



Sharing earth observation infrastructure, technology and data resources

- WG2 continuously encourages Member States to do so on a voluntary basis.
- Such sharing activities are expected to be included in the Best Practices and considered in compiling the Guidelines.



Summary of Activities

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1	Identify NGIAs' contribution areas for effective implementation of the SFDRR.	2015-2018	Almost Completed Contribution list
2	Investigate present and future roles of NGIAs through a questionnaire survey.	2015-2017	Completed Survey report
3	Collect Best Practices (BP)	2015-2017	Almost Completed BP collection
4	Compile a guideline to help NGIAs promote geospatial activities for DRR.	2017-2018	Continue Guideline
5	Coordination and cooperation with the UN-GGIM Working Group on disasters.	2015-2018	Continue (enhanced coordination)
6	Encourage Member States to share earth observations infrastructure, technology and data resources.	2015-2018	Continue (further sharing)



*Thank you
for your attention*

