

# **Record of Proceedings**

# The Third Plenary Meeting of the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP)

10-12 November 2014

Discovery Kartika Plaza Hotel

Bali, Indonesia

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## A. Introduction

- This record is a summary of the Third Plenary Meeting of the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP) held from 10 - 12 November 2014 in Bali, Indonesia.
- 2. The agenda of the meeting is attached as Annex 1.

## B. Attendance

3. The meeting was attended by 80 national delegates from 15 countries and observers from 6 international organizations. The full list of participants is attached as Annex 2.

## C. Opening of the Meeting

- 4. Dr. Li Pengde, President of UN-GGIM-AP, made a welcome address, expressing his appreciation to the host on preparations for the meeting and the members for their participation. In his address, he highlighted the vital role of the regional committee in taking forward regional agenda at the global level and called members' further commitment and cooperation towards next year, where a number of landmark events will be held including the setting of post-2015 Development Agenda. The full text of his welcome address is attached as Annex 3.
- Mr. Dewa Made Indera, Head of Disaster Management Authority of Bali Province, expressed his appreciation to UN-GGIM-AP President and BIG for choosing Bali as the venue, and extended his sincere welcome to all the

participants and wishes for a successful meeting The full text of his welcome address is attached as Annex 4.

- 6. Dr. Arifin Rudiyanto, Minster Expert Team in Regional Planning and Maritime National Development Planning Agency extended his warm welcome to all the participants. In his address, he emphasized the importance of reliable geospatial information in all decision making. The full text of his speech is attached as Annex 5.
- 7. Mrs. Titiek Suparwati Acting Head of Geospatial Information Agency (Badan Informasi Geospasial/BIG) made a welcome address, highlighting the role of BIG in leading Indonesia's national initiative on developing central database for all geospatial information in the Government. The full text of her speech is attached as Annex 6.

## D. Confirmation of Agenda

8. Agenda was confirmed as presented.

## E. UN-GGIM-AP Executive Report

- The Secretariat of UN-GGIM-AP, Ms. Mei Maruyama gave a summary of the UN-GGIM-AP activities since the 2nd Plenary Meeting of UN-GGIM-AP held in Tehran, Islamic Republic of Iran from 28-30 October 2014. The full text of the Executive Report is attached as Annex 7.
- Personnel change was reported and accepted. Dr. Choe Byoung-Nam, Republic of Korea, replaced Mr. Im-Joo-bin as Vice President of the Committee. Mr. Basara Miyahara, Japan, replaced Dr. Yuki Kuroishi as Vice Chair of Working Group 1.
- Cooperation with liaisons and other related international organizations, including ISO/TC 211, The United Nations Initiative on Global Geospatial Information Management (UN-GGIM), International Federation of Surveyors (FIG), and International Steering Committee for Global Mapping (ISCGM)

continued in various forms through participation in the meetings, paper submission and support to projects and initiatives.

12. Regarding the next meetings, Mongolia offered to host the next UN-GGIM-AP Executive Board meeting in early June in Terelj. The 4th Plenary Meeting of UN-GGIM-AP is planned to be held in early October, Jeju, Republic of Korea, in conjunction with the 20th United Nations Regional Cartographic Conference for Asia and the Pacific (UNRCC-AP).

#### F. Reports from Liaison Organizations

- 13. Mr. Keran Wang, Section Chief, Space Applications Section, Information and Communications Technology and Disaster Risk Reduction Division, United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), presented the liaison report. He highlighted application of geospatial information in ESCAP's projects, and proposed possible areas of collaboration between ESCAP and UN-GGIM-AP such as disaster management and capacity building. The presentation slides are attached as Annex 8.
- 14. Mr. Greg Scott, Advisor of UN-GGIM, United Nations Statistics Division, presented the liaison report on behalf of UN-GGIM: Europe. He reported on the formal establishment of UN-GGIM: Europe on 1 October 2014, and outlined its structure and work program. The full text of the report is attached as Annex 9.
- 15. Mr. Shinichi Sakabe, ISCGM Secretariat, Director of International Affairs Division, Planning Department, Geospatial Information Authority of Japan (GSI), presented the liaison report. He introduced ISCGM's new initiatives including Web Platform for Urban Hazard Mapping, Catalogues Service, and New ISCGM Website. The full text of the report is attached as Annex 10.
- 16. Mr. Teo CheeHai, President of FIG, presented the liaison report. He provided a summary of the XXV FIG General Assembly held in June 2014 and reported that FIG/UN-GGIM-AP Statement on Global Geodetic Reference Frame was unanimously adopted by the FIG General Assembly.

He also outlined collaborative activities with UN-GGIM and Global Land Tool Network (GLTN). Full text of the report is attached as Annex 11.

17. Dr. Sukendra Martha, Vice President of International Cartographic Association (ICA), presented a liaison report, outlining the overview of the organization and the recent activities. He pointed out the lack of participation from Asia and the Pacific countries, and called for more active participation from our region. The presentation slides are attached as Annex 12.

#### G. UN-GGIM-AP/UN-Habitat Global Land Tool Network Special Session

- 18. Mr. Teo CheeHai, President of FIG presented on land tenure challenges in Asia and the Pacific region and its developments and activities. He highlighted the importance of policies and land management strategies in supporting sustainable development, and encouraged UN-GGIM-AP to address land tenure challenges. The presentation slides are attached as Annex 13.
- 19. Mr. Danilo Antonio, Programme Officer, UN-Habitat, gave a presentation outlining land tenure challenges and opportunities in Asia and the Pacific region. By introducing the Global Land Tool Network (GLTN), he highlighted the importance of the fit-for-purpose approach in building sustainable land administration systems. The presentation slides are attached as Annex 14.

#### H. Presentation on the Main Theme: Disaster Management

20. Indonesia.

Mr. B. Wisnu Widjaja, Deputy Chairman for Disaster Prevention and Readiness, National Disaster Management Authority (BNPB), presented a report on the main theme, outlining major role of BNPB in disaster management in providing risk maps for 33 provinces and more than 60 districts/cities of Indonesia. In relation to Hyogo Framework for Action (HFA) Priority 2, he highlighted Indonesia's efforts in developing disaster risk index and risk maps of the local areas. As for the measures taken for HFA Priority 5, he reported on the development of the evacuation route plan for tsunami-prone areas, Scenario identification for planning and response operations, and development of software to assist assessment of hazard impacts. The presentation slides are attached as Annex 15.

#### 21. Mongolia

Mr. Khurelshagai Ayurzana, Director General of the Administration of Land Affairs, Geodesy and Cartography, Implementing Agency of the Mongolian Government, presented a report on the main theme, introducing dzud, drought, storm, wildfire and flood risk maps developed in cooperation with National Emergency Management Agency (NEMA) and Academia of Science. He reported that Mongolia is in the early stage of developing geospatial information technology, and pointed out the need for domestic and international support in improving data quality. As recommendations to UN-GGIM-AP Working Group 2 (WG2), he proposed support for capacity building for NSDI development and disaster management as well as knowledge sharing. The presentation slides are attached as Annex 16.

#### 22. Republic of Korea

Dr. Sanghoon Lee, Team-leader of International Cooperation & Standard Team, Deputy Director of Planning and Policy Department at National Geographic Information Institute (NGII) presented on the NGII's coordinating efforts with public agencies, local governments and the private sector in disaster management. In addition to the support during the post-disaster phase, he highlighted NGII's activities in pre-disaster phase, which includes spatial risk assessments and vulnerability analysis. As recommendations for WG2, he suggested geoportal to be developed in accordance with the ISO standards and encouraged incorporation of information from the public including Volunteered Geographic Information (VGI). In relation to the measures taken for HFA Priority 2, he highlighted activities to identify flood vulnerable municipals through spatial analysis. As for the measures taken for HFA Priority 5, he reported about disaster drills using geospatial information and the development of a disaster prevention plan. Finally, he made recommendations to the Third UN World Conference on Disaster Risk Reduction (WCDRR). These recommendations include putting emphasis on NGIA's and Citizens' empowerment in disaster geospatial information and addressing support for capacity building. The presentation slides are attached as Annex 17.

#### 23. New Zealand

Mr. Robert Deakin, Chief Spatial Data Infrastructure Steward, Geospatial Office, Land Information New Zealand (LINZ), presented on LINZ's efforts to support massive reconstructions of the city after Canterbury earthquake in 2011. He highlighted the cooperation among LINZ, academia and NGOs in developing information sharing tools to facilitate reconstruction efforts. These tools include Viewer, Crowd Application, and 3D Visualizations. Based on the case of the Canterbury reconstructions, he emphasized the importance of making geospatial information widely available. In making recommendation to WG2, he addressed the importance of having clear purpose on data sharing, common tools and methods. In relation to the measures taken in relation to HFA Priority 2, he highlighted the development and dissemination of risk maps and advocacy activities. He also outlined measures taken for HFA Priority 5, which include operation of disaster drills and disaster prevention educations. The presentation slides are attached as Annex 18.

#### 24. Islamic Republic of Iran

Dr. Alireza Azmoudeh Ardalan, Director General of National Cartographic Center of Iran (NCC), Full Professor, University of Tehran, outlined Iran's legal framework for disaster management and corresponding NCC activities. Considering the significance of spatial information in strategic planning and in disaster management, NCC is affiliated to Vice-Presidency for Strategic Planning and Supervision, and providing support in all phases of disaster management cycle by actively cooperating with academia and the public sector. In relation to recommendations for WG2, he suggested WG2 to cover 4 disaster phases including response, recovery and mitigation. As for the measures taken in relation to HFA Priory 2, he highlighted activities for precursor determination and risk warning for earthquake, tsunami and drought. He reported that as a part of measures taken for HFA Priory 5, NCC has conducted disaster drills by using geospatial information. Also he reported on the establishment of NCC geoportal. Lastly, in making recommendation to the 3rd WCDRR, he suggested to highlight the role of

geospatial information in assisting disaster management. The presentation slides are attached as Annex 19.

25. Brunei Darussalam

Mr. Haji Ali Bakar Haji Kasim, Acting Surveyor General, Survey Department, Ministry of Development, reported on their efforts and challenges in disaster management. As a part of their efforts to facilitate easy access to data for the government agencies, he highlighted Survey Department's geoportal launched in 2012. He described challenges in relation to maintaining geoportal as keeping up with rapid changing technologies and keeping information up to date. In this connection, he suggested UN-GGIM-AP WG2 to support for capacity building trainings in addition to support for knowledge sharing. As for the status of actions taken in relation to HFA Priority 2, he introduced activities related to provision of maps, improving access to geoportal and GIS training. He also explained activities conducted in relation to HFA Priority 5, which include identification of disaster risks in the local areas and workshop for making hazard maps. The presentation slides are attached as Annex 20.

#### I. Presentation on the Sub Theme: Capacity Building

26. Malaysia

Mr. Hasan Jamil, Deputy Director General I, Department of Survey and Mapping Malaysia (JUPEM) presented on the sub theme outlining JUPEM's structure and its personnel systems. He reported that in addition to domestic capacity building programs through National Institute of Land and Survey and National Institute of Public Administration, a number of personnel have also participated to oversea training course. He pointed out training personnel to keep up with the new technologies in geospatial information, implementing geospatial data standards, and accommodation to cloud and big data as challenges. The presentation slides are attached as Annex 21.

27. Azerbaijan

Dr. Javid Abdullayev, Head of Geospatial and Information Technologies Department, State Committee on Land and Cartography (SCLC) reported on the SCLC staff structures, recruitment processes and its training programs. Including subordinate institutions, SCLC has 1731 staffs and conducts various training programs including utilization of geospatial information in e-governance. In relation to required areas of capacity building and programs, he highlighted needs for technical experts in datasets building, management, and interpretation. For administrative experts, he indicated capacity building needs in utilization of analytical tools. The presentation slides are attached as Annex 22.

#### 28. Singapore

Mr. Lewis Wu, Senior Deputy Director of GeoSpatial Division and Mr. Brian Liu, Senior Geospatial Consultant Geospatial Division, Singapore Land Authority (SLA) presented on SLA's initiative in growing Geo-Capabilities in supporting the government, economy and the people (Geo-Government, Geo-Economy, and Geo-People). Mr. Wu outlined SLA's efforts to build GeoSptatial competencies within and across public sector through trainings for officers, pilot projects and geo-fund projects. Also he highlighted efforts to support growth of geospatial industry and economy through a common geospatial platform, One Map Singapore. Lastly, Mr. Liu explained their efforts to develop nation-wide geospatial capability and literacy through trainings, scholarships, and events. The presentation slides are attached as Annex 23.

## J. Outcomes of the 4th Session of UN-GGIM and the 3rd High Level Forum on UN-GGIM

29. Mr. Greg Scott gave a summary of outcomes from the 4th session of UN-GGIM and the 3rd High Level Forum on UN-GGIM. From the summary of the 4th session of UN-GGIM held on August 2014 in New York, he reported on the expansion of Bureau with 3 co-chairs, and 1 rapporteur followed by the summary of the decisions. In relation to the decision on Global Geodetic Reference Frame (GGRF), he highlighted the next action, which is to take GGRF Resolution through ECOSOC to General Assembly. He also stressed the importance of developing the roadmap on GGRF after the General Assembly Resolution and encouraged the Asia and the Pacific member countries to participate in developing a roadmap for GGRF. 30. From the summary of the 3rd High Level Forum held on October 2014 in Beijing, he reported that under the 5 sessions, with a key focus on the role of geospatial information in sustainable development, participants reaffirmed urgent need to advance the critical role of geospatial information in sustainable development and the post-2015 development agenda in terms of measuring and monitoring targets and indicators. In this connection he emphasized the importance of the each member to be responsible to provide the leadership to inform the government about the critical role of measuring geospatial information in and monitoring sustainable development. The presentation slides are attached as Annex 24.

#### K. Report and Discussions on Working Group 1

- 31. Dr. John Dawson, Chair of Working Group 1 on Geodetic Reference Frame for Sustainable Development (WG1) reported on the progress of the WG1 activities. He outlined the continuous efforts and progresses of 4 major activities, including Asia-Pacific Reference Frame (APREF) Project, Asia-Pacific Regional Geodetic Project (APRGP), Asia-Pacific Geodetic Capacity Building (APGCB) Project and Asia-Pacific Regional Height System Unification (APRHSU) Project. He also reported the cooperation with UN-GGIM which included development of Geodesy concept note, presentation, animation, and a draft United Nations General Assembly Resolution on GGRF.
- 32. Dr. Wen Hanjiang, Vice Chair of WG1 reported on the progress on the Geodetic Datum in China. He introduced the modernization of geodetic datum in China, including refinements of CORS system and quasi-geoid. He reported that with improvements of BeiDou Navigation Satellite System, new geodetic datum will be established in 2016 in China, which will also contribute to refinements of marine geoid and unification of regional vertical datum.
- 33. Dr. Alireza A. Ardalan, presented on the process of height datum unification and re-enforcement of leveling through the Geodetic Boundary Value Problem (GVBP) approach. He highlighted that height unification is essential for analyzing change in sea level, flood, and other natural disasters.

Considering current height model has potential differences, he pointed out that application of GVBP can be considered as a way to overcome such differences and could contribute to height unification.

34. The full report and slides of WG1session are attached as Annex 25.

#### L. Report and Discussions on Working Group 2

- 35. Mr. Peyman Baktash, Chair of Working Group 2 on Data Sharing and Integration for Disaster Management, General Manager of GIS and SDI Department, Islamic Republic of Iran, presented on the summary of the progress of the WG2 activities which includes investigation of Disaster Management Geoportals (DMG), investigation of required data for DMG, and initial design of DMG architecture. He introduced a sample DMG developed by Iran and explained a plan to conduct a pilot test through sample DMG for 2015.
- 36. Mr. Yunpeng Jia, Deputy Director of Department of National Geographic Monitoring, National Geomatics Center of China, presented on challenges and issues of regional geoportal on disaster data sharing from perspective of China on behalf of Vice Chair of WG2, Dr. Zhou Xu. He introduced Tianditu, the national geoportal which is used not only for disaster management but also for integration of various economic and social data. As for the suggestions on required items to be placed in regional geoportal, he highlighted a need for real time data especially during disasters in addition to basic background data.
- 37. Mr. Robert Deakin, Vice Chair of WG2, presented on challenges and recommendations for WG2 activities on regional geoportal on disaster data sharing. From the New Zealand's experience, he reported a challenge in matching specifications among different types of platform even though they comply with Open Geospatial Consortium (OGC) standards. In this connection, he highlighted the importance for the work of WG2 to agree on not only the dataset standards, but also to agree on web service standards and test between the platforms. As a part of OGC's interoperability initiative,

he introduced OGC Testbed 11, and expressed willingness to put the work of WG2 to in this initiative.

- 38. Dr. Lee Sanghoon, Vice Chair of WG2, outlined conceptual framework for VGI-based DMG based on Korea's experience on community mapping. In introducing VGI-based DMG Framework, he explained a plan to implement user case catalogue for urban hazards which is to be connected to UN-GGIM-AP DMG. In making recommendation to WG2 activities, he proposed WG2 to consider the following: incorporation of citizen's geospatial experiences in DMG and application of specific user cases such as urban hazards. In terms of incorporating VGI-based information, he outlined technical challenges in controlling quality and conducting validation analysis. Also, he stressed a need for WG2 to discuss and consider for standards, security and privacy issues in relation to VGI-based information.
- 39. Mr. Lewis Wu, Singapore, presented on development of Singapore's data sharing model and its benefits. He explained Singapore's adoption of data hub model, which helped to overcome coordination, efficiency, duplication challenges in data sharing among the government agencies. He reported as a result of application of the hub model, use of geospatial information and data sharing among the government agencies are significantly increased.
- 40. Dr. Antonius B. Wijanarto, Vice Chair of WG2, Head of Center for Management and Dissemination of Geospatial Information, introduced a concept of Ina-Geoportal and conducted data sharing demonstration. He explained Ina-Geoportal provides fundamental data for all geospatial information in the government, while also supporting the input of VGI, which can be published once quality is confirmed. He also introduced a launch of compatibility testing geoportal for disaster data sharing to be used for UN-GGIM-AP members, and conducted a demonstration for disaster data sharing based on the data provided from Japan and New Zealand. As for the identified challenges, he pointed out issues around standards, accessibility, domain name, and user interfaces and recommended WG2 to have further discussions on these areas.

41. Mr. Baktash gave a summary of the WG2 session by taking into the account of recommendations from WG2 Vice Chairs and other member countries. The full report and slides of WG2 session are attached as Annex 26.

#### M. Report and Discussions on Working Group 3

42. Dr. Jiang Jie, Chair of Working Group 3 on Place-based Information Management for Economic Growth reported on the summary of WG3 the activities. She outlined the continuous efforts and progresses of the major works including investigation on the status of development of place-based information management, user requirement analysis, and case studies on measurement of return on investment for Australia, case study on web-based distributed geo-data management and on-line services in China, studies on fast acquisition and update of place-based data in Malaysia, and convention of the seminars. As for the work for the coming year, she announced plans to organize pilot studies, trainings and tutorials on fast data acquisition and updating, web/cloud-based services, under the leadership of UN-GGIM-AP. The full report and slides of WG3 are attached as Annex 27.

#### N. Next Meetings

43. Mr. Seung-weon Shin, Assistant Deputy Director, NGII, Republic of Korea, announced a preliminary plan for the 4th UN-GGIM-AP Plenary Meeting which will be held in Jeju Island from 6-9 October 2015, in conjunction with the 20th UNRCC-AP. The presentation slides are attached as Annex 28.

#### O. Resolutions

- 44. Following seven resolutions were presented and adopted :
  - 1. Geodetic Reference Framework for Sustainable Development
  - 2. Regional Geoportal for Disaster Management and Capacity Development
  - 3. Place-Based Information Management for Economic Growth
  - 4. Contribution to UN-GGIM
  - 5. Land Administration and Tenure Challenges

- 6. Strengthening UN-GGIM-AP Activities
- 7. Next Meeting

The full text of the Resolutions is attached as Annex 29.

#### P. Other Matters

45. No other matters were presented.

## Q. Closing

46. Dr. Li Pengde, the President of UN-GGIM-AP, concluded the meeting by thanking BIG, Indonesian Government and Bali Province for their generous hospitality and support in hosting the meeting and called for continuous involvement of all member countries in the Committee's activities.