



# **Record of Proceedings**

**The Sixth Plenary Meeting of**

**The Regional Committee of United Nations Global Geospatial**

**Information Management for Asia and the Pacific**

**(UN-GGIM-AP)**

**16-19 October 2017, Kumamoto Prefecture, Japan**

## Record of Proceedings

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

16-19 October 2017

Kumamoto City International Center, Kumamoto Prefecture, Japan

### **A. Introduction**

This record is a summary of the Sixth Plenary Meeting of the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP), and the side event - the Workshop on Regional Challenges, Benefits and Opportunities of Exchanging Geodetic Data, jointly organized by UN-GGIM-AP WG1, Geospatial Information Authority of Japan (GSI), and the International Federation of Surveyors (FIG) - on 16 - 19 October 2017, in Kumamoto Prefecture, Japan. The agenda of the meeting is attached as **Annex 1**.

### **B. Attendance**

The meeting was hosted by GSI, and attended by 67 representatives and observers from 13 UN-GGIM-AP Member States and 4 international organizations. The full list of the participants is attached as **Annex 2**.

### **C. UN-GGIM-AP WG1 Workshop**

The Workshop on Regional Challenges, Benefits and Opportunities of Exchanging Geodetic Data was held on 16 October, jointly organized by UN-GGIM-AP WG1, GSI and FIG. It was attended by about 30 participants, providing a good platform for sharing knowledge and experience in geodetic data sharing. Informative presentations from 8 international presenters and interactive discussions were made on such topics as benefits and opportunities, policy guiding “principles”, main challenges, and capacity development issues of geodetic data sharing. The program of the Workshop is attached as **Annex 3**.

The presentations of the Workshop are also available at the UN-GGIM-AP website: [http://www.un-ggim-ap.org/meetings/pm/6th/201707/t20170704\\_389286.shtml](http://www.un-ggim-ap.org/meetings/pm/6th/201707/t20170704_389286.shtml).

### **D. Opening of the Meeting**

At the first session of the Meeting on 17 October, Dr. Hiroshi Murakami, in his capacity as the President of UN-GGIM-AP, opened the Meeting and welcomed the participants. He expressed sincere gratitude to all the participants for coming along, and the Kumamoto Prefecture for providing the meeting venue. He briefly reviewed the work progress of the Committee during the last year, and introduced the program and the venue place of the Meeting. The full text of his speech is attached as **Annex 4**.

Dr. Ikuo Kabashima, Governor of the Kumamoto Prefecture, extended warm welcome and generous hospitality to the participants. He recalled the Kumamoto Earthquake in

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2016, and stressed that geospatial information played an important role in the disaster response and reconstruction during and after the Kumamoto Earthquake in 2016.

**E. Confirmation of Agenda**

At the same session, in its consideration of agenda item 2 “Confirmation of Agenda”, the proposed agenda was accepted as presented.

**F. Executive Report of UN-GGIM-AP**

At the same session, in its consideration of agenda item 3 “Executive report of UN-GGIM-AP”, Ms. Jiang Xiaohong, Secretariat of UN-GGIM-AP, reported on the activities of the Committee since the Fifth Plenary Meeting held in Kuala Lumpur, Malaysia on 16-20 October 2016. Reviewed were the Fifth Plenary Meeting and the UN-GGIM International Forum on Policy and Legal Framework for Geospatial Information, the Executive Board Meeting on 4 April 2017 in Sydney, Australia, the Kunming Forum on UN-GGIM on 10-12 May 2017, the two capacity building events convened by UN-GGIM-AP WG1 in July (Kobe, Japan) and WG3 in September (Beijing & Wuhan, China), and the Informal Meeting during the Seventh Session of UN-GGIM in August 2017 in New York. Highlighted were the contributions made to UN-GGIM, including the substantive support to the work of UN-GGIM WGs and Thematic Groups, contributions to the UN-GGIM capacity building events, and reports to the UN-GGIM Expanded Bureau Meetings and its Seventh Session. The report also introduced the Committee’s efforts in developing and maintaining its liaison with relevant international organizations. The full report is attached as **Annex 5**.

**G. Report from the UN-GGIM Secretariat**

At the same session, the Plenary began its consideration of agenda item 4, “Report from the UN-GGIM Secretariat”. Mr. Chee Hai Teo, Secretariat of UN-GGIM, reported on the major activities of UN-GGIM during the past year. Highlighted were the two new WGs on Marine Geospatial Information and Legal and Policy Frameworks for Geospatial Information Management, and the 2017 - 2021 UN-GGIM Strategic Framework. By quoting the UN-GGIM Decision 7/101, he stressed the importance of the support of the regional committees, thematic groups and other relevant stakeholders in implementing the Framework. He briefed on the International Workshop on Legal and Policy Frameworks for Geospatial Information Management to be held in Tianjin in early November, and the first meeting of UN-GGIM Sub-Committee on Geodesy to be held in Mexico in late November. He urged UN-GGIM-AP to send representatives to attend the events. He also stressed the mandates of UN-GGIM in strengthening national geospatial information systems and capacities, addressing the data needs for the 2030 Agenda, and helping Member States implement their national strategic priorities, make decisions, and measure and monitor outcomes. The Eighth Session of UN-GGIM is scheduled to be held from 1-3 August 2018. The presentation is attached as **Annex 6**.

Dr. Li Pengde, Secretary of UN-GGIM-AP, encouraged the Member States to participate in the International Workshop to be held in Tianjin in early November. India proposed to

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establish a regional Working Group on SDGs, and expressed willingness to financially support UN-GGIM-AP capacity building projects.

## **H. Reports from the Liaison Organizations**

### **1. UN ESCAP**

At the same session, the Plenary began its consideration of agenda item 5, “Reports from the Liaison Organizations”. Mr. Werner Balogh, Chief of Space Applications Section, ICT and Disaster Risk Reduction Division (IDD), UN ESCAP gave a liaison report. He introduced UN ESCAP and its relationship with UN-GGIM-AP, and suggested the potential cooperation opportunities. UN ESCAP was established in 1947. It represents 53 Member States and 9 Associate Members, and performs the role of regional development arm of UN for Asia and the Pacific region. In accordance with the ECOSOC Resolution E/RES/2016/27, the regional commissions were mandated to provide relevant support, upon request and as appropriate, to the work of the regional bodies of the United Nations Initiative on Global Geospatial Information Management. To carry out this mandate, UN ESCAP is seeking cooperation opportunities with UN-GGIM-AP. It was suggested that UN ESCAP and UN-GGIM-AP may cooperate in such areas as Asia-Pacific Plan of Action for Space Applications (2018-2030), UN-GGIM Development Account Project, UN Statistical Institute for Asia and the Pacific, and UN ESCAP SDG Help Desk. The presentation is attached as **Annex 7**.

### **2. FIG**

At the same session, continuing its consideration of agenda item 5, Mr. Mikael Lilje, Vice President, International Federation of Surveyors (FIG) gave a liaison report. He introduced FIG and its liaison activities with UN-GGIM-AP. As an UN-recognized non-government organization, FIG represents all surveying disciplines. It was established in Paris in 1878 and aims to ensure the disciplines of surveying and all who practice them meet the needs of the markets and communities that they serve. Its liaison activities with UN-GGIM-AP focus on capacity building in geospatial information through the FIG Asia Pacific Capacity Development Network and Commission 5. FIG and UN-GGIM-AP has jointly convened various technical forums, seminars and meetings since 2013. There were also several upcoming joint events. FIG collaborated with UN-GGIM-AP to review and update the publications of *Geoinformation for Disaster and Risk Management*, *the Contribution of the Surveying Profession to Disaster Risk Management*, and *Reference Frame in Practice Manual*. The 26<sup>th</sup> FIG Congress will be held in Istanbul, Turkey from 6-11 May 2018. The presentation is attached as **Annex 8**.

## **I. Reports from the UN-GGIM-AP Working Groups**

### **1. WG1 on Geodetic Reference Frame**

At the same session, the Plenary began its consideration of agenda item 6, “Reports from UN-GGIM-AP Working Groups”. Dr. John Dawson, Chair of UN-GGIM-AP WG1, presented the activity report of WG1. It included four working areas: 1) UN-GGIM Geodesy, 2) Regional Reference Frame (APREF & APRGP), 3) Regional Height System

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Unification, and 4) Regional Capacity Building. Highlighted were the capacity building events organized by WG1 during the past year, and the transition of the UN-GGIM Global Geodetic Reference Frame WG to the Subcommittee on Geodesy that aimed at an accurate, sustainable and accessible Global Geodetic Reference Frame to support science and society. The full report is attached as **Annex 9**.

## **2. WG2 on Disaster Risk Management**

At the same session, Mr. Toru Nagayama, Chair of UN-GGIM-AP WG2, presented the activity report of WG2. WG2 completed the most work of the first three working items of its 2015-2018 work plan, i.e. 1) identifying NGIAs' contribution areas for Sendai Framework for Disaster Risk Reduction (SFDRR); 2) investigating present and future roles of NGIAs through a questionnaire survey; and 3) collecting best practices. WG2 started to work on compiling guidelines to help NGIAs promote geospatial activities for DRR in 2017, continued to coordinate and cooperate with UN-GGIM WG on Geospatial Information and Services for Disasters, and encouraged the sharing of earth observations infrastructure, technology and data resources among the Member States. The full report is attached as **Annex 10**.

## **3. WG3 on Regional SDI**

At the same session, Dr. Jiang Jie, Chair of UN-GGIM-AP WG3, presented the activity report of WG3. The activities carried out by WG3 during the past year included the elementary analysis to the questionnaire on current spatial data infrastructure status in Asia and the Pacific region, the pilot on establishing the regional SDI portal, the connection with UN-GGIM WG on Global Fundamental Geospatial Data, and the organization of the International Seminar on Construction and Application of SDI on 15-22 September 2017 in Beijing and Wuhan, China. WG3 is planning to hold the second International Seminar on Construction and Application of SDI in Beijing, China, in May 2018, in conjunction with the ISPRS TC III Symposium. The full report is attached as **Annex 11**.

## **4. WG4 on Cadastre and Land Management**

At the same session, Dr. Byung-Gul Lee, Chair of UN-GGIM-AP WG4, presented the progress report on Cadastre and Land Management. He summarized the WG4 Workflow, and introduced the Questionnaire Survey I & II and their results, and presented the Conceptual Model for Cadastre and Land Management. Also reviewed was the Fit-For-Purpose and STDM Workshop held on 17 October 2016, in Kuala Lumpur, Malaysia. The full report is attached as **Annex 12**.

## **J. Parallel Sessions of the UN-GGIM-AP WGs**

After the first session of the Plenary, the four UN-GGIM-AP WGs organized parallel discussions on the four subjects: 1) geodetic reference frame, 2) disaster risk management, 3) regional SDI, and 4) cadastre and land management to identify

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challenges and opportunities, and propose actions for the next year.

#### **K. Special Session on Geospatial Information for Disaster Response**

Agenda item 7 “Special Session - Geospatial Information for Disaster Response -Case study on the Disaster Response for Kumamoto Earthquake in April 2016” started on the afternoon of 17 October and ended on 18 October.

The Special Session was designed and organized by the host, GSI, to share Japan’s experience in disaster risk management and provide inputs to the NGIAs guidelines for disaster risk management to be developed by UN-GGIM-AP WG2. It comprised five parts, i.e., 1) Background, 2) Outset of the 2016 Kumamoto Earthquake, 3) Emergency Disaster Response Activities, 4) Activities for Recovery and Reconstruction, and 5) Overall Management of Disaster Response Activities. The Session was chaired by Dr. Hiroshi Murakami, Director General of GSI, and moderated by Mr. Toru Nagayama, Director of Planning Division, Geographic Department of GSI, and Chair of UN-GGIM-AP WG2.

##### **Part 1: Background**

The background information was provided in this part, including Japanese geography and disaster, legal framework for disaster response, and GSI’s role in the Government and its preparatory work for disasters. The moderator raised two questions in this part: 1) the legal base in each country that mandates NGIAs to take necessary actions for disaster risk management; and 2) the preparation measures that NGIAs shall take before the occurrence of a disaster. India, China, New Zealand, Philippines, Iran and Korea shared experience in the discussions. The presentation is attached as **Annex 13**.

##### **Part 2: Outset of the 2016 Kumamoto Earthquake**

The moderator started to reproduce what happened during the Kumamoto Earthquake. The outset of the Earthquake was introduced in this part. GSI took initial response actions including officials’ safety status and availability check, disaster management headquarters establishment, aerial photography, crustal movements monitoring by CORS analysis, communication channels establishment, information provision through GSI Maps and social media, and renewing response strategy upon the second shock. Discussions were initiated on NGIAs’ supposed initial responses, way to summon and deploy employees, and an organization’s immediate decisions after the disaster. Based on the practice of GSI in the Kumamoto Earthquake, India, Iran, Philippines, Singapore, and China shared their experience and gave supplement suggestions. The presentation is attached as **Annex 14**.

##### **Part 3: Emergency Disaster Response Activities**

During the two weeks after the main shock, GSI provided assistance to the Onsite Disaster Management Headquarters and relevant organizations to facilitate the disaster response. To meet the needs of all stakeholders, GSI organized and implemented the

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work of the second aerial photo mission, production and release of the “GSI maps”, landslide distribution mapping, UAV imagery and its media coverage, crustal movements monitoring after the main shock, fault modeling using CORS data, and SAR interferometric analysis. Discussions were made around how to find out the geospatial needs of relevant stakeholders, and best provide geospatial information to stakeholders at the outset phase of a disaster. India, New Zealand, Iran, China and Tonga actively contributed to the discussions, shared experience, and gave suggestions. The presentation is attached as **Annex 15**.

#### **Part 4: Activities for Recovery and Reconstruction**

There emerged new geospatial information needs in the recovery and reconstruction phase in the light of the new policy agenda implemented of temporary house construction, permanent infrastructure recovery, city planning for reconstruction, and debris removal. GSI took actions of control points resurvey, post-earthquake aerial laser survey, 3D model for Kumamoto Castle, and secondary landslides response to meet the geospatial information needs. The moderator led interactive discussions around NGIAs’ contribution during the recovery and reconstruction phase for the disaster stricken areas. New Zealand and Tonga shared their experience and highlighted the importance of active faults mapping and the timely provision of basic maps including the topographic maps. The discussions also paid attention to the use of CORS to identify coordinates after the earthquake. New Zealand, Tonga, Viet Nam, Singapore, China, India and Korea contributed to the discussions. The presentation is attached as **Annex 16**.

#### **Part 5: Overall Management of Disaster Response Activities**

This part reviewed GSI’s overall management during the Earthquake response. A model on the NGIAs’ disaster management cycle was abstracted and presented. The moderator highlighted that the review meeting brought about improvement in Kumamoto response. He also highlighted the outreach toward stakeholders and their high expectation for timely provision of geospatial information during disaster response, which posed a challenge to NGIAs in changing the mode of operation from normal to emergency. Discussions were conducted on how to organize disaster response management, continuous improvement of NGIAs’ services, and the challenges faced by NGIAs. New Zealand, Iran, China and Tonga contributed to the discussions. The presentation is attached as **Annex 17**.

Dr. Li Pengde summarized five major points from the Special Session as 1) disaster management education; 2) pre-disaster practice; 3) infrastructure improvement; 4) legal mandate and mechanism development; and 5) data sharing.



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## **L. Reports back from the UN-GGIM-AP WGs on the Discussions**

### **1. WG1 on Geodetic Reference Frame**

At the second session of the UN-GGIM-AP Plenary on 18 October afternoon, continuing its consideration of “Reports from UN-GGIM-AP Working Groups”, Dr. John Dawson, Chair of UN-GGIM-AP WG1, reported on the outcomes of the discussions during the Parallel Session on 17 October afternoon, as well as the joint workshop of UN-GGIM-AP WG1, GSI and FIG on Regional Challenges, Benefits and Opportunities of Exchanging Geodetic Data held on 16 October. WG1 discussions focused on its challenges, opportunities and actions. Highlighted were the need for geodetic data strategies and policies, and the multilateral collaboration in geodetic capacity building. The presentation is attached as **Annex 18**.

### **2. WG2 on Disaster Risk Management**

At the same session, Mr. Toru Nagayama, Chair of UN-GGIM-AP WG2, summarized the outcomes of the parallel session discussions of WG on Disaster Risk Management. He put forward 2017-2018 WG2 actions based on the framework of the 2015-2018 work plan. WG2 will finalize all the relevant work specified in the 3-year plan and share the work results to the Member States; seek further coordination and cooperation with the UN-GGIM WG on Disasters; and keep encouraging Member States to share earth observation infrastructure technology and data resources for disasters. The presentation is attached as **Annex 19**.

### **3. WG3 on Regional SDI**

At the same session, Dr. Jiang Jie, Chair of UN-GGIM-AP WG3, gave a summary on the WG3 discussions. She highlighted the experience, comments and suggestions given by delegates from India, Iran, Japan, Tonga, and Viet Nam on national SDI development, promotion and sharing of WG3 achievements, coordination and collaboration for SDI capacity development of the Member States, and data sharing. The draft resolution on Regional SDI based on the discussions was presented. The presentation is attached as **Annex 20**.

### **4. WG4 on Cadastre and Land Management**

At the same session, Dr. Byung-Gul Lee, Chair of UN-GGIM-AP WG4, summarized the discussion results of WG parallel session on cadastre and land management. He introduced the key issues from the discussions. WG4 needs to consider the appropriateness of the draft conceptual model proposed by the Chair of the Working Group on the basis of the initial study by WG4, and report back at the Seventh Plenary Meeting on the draft conceptual model. The presentation is attached as **Annex 21**.

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#### **M. Resolutions of the Sixth Plenary Meeting of UN-GGIM-AP**

At the same session, the Plenary began its consideration of agenda item 8 “Resolutions of the Sixth UN-GGIM-AP Plenary Meeting”. The five resolutions on Geodetic Reference Frame, Disaster Risk Management, Regional SDI, Cadastre and Land Management, and Special Session on Geospatial Information for Disaster Response were presented, discussed and adopted. The full text of the resolutions is attached as **Annex 22**.

#### **N. The Seventh Plenary Meeting of UN-GGIM-AP**

Also at the same session, the Plenary began its consideration of agenda item 9 “Seventh UN-GGIM-AP Plenary Meeting”. The Seventh Plenary Meeting of the Committee will be hosted by China. Dr. Li Pengde, Deputy Director General of the National Administration of Surveying, Mapping and Geoinformation of China, presented a preliminary plan for the Meeting. The Meeting will be convened in conjunction with the First United Nations World Geospatial Information Congress in Deqing, Zhejiang Province, China in November 2018. The UN-GGIM-AP flag was handed over from Japan to the next host country China.

#### **O. Closing of the Meeting**

Dr. Hiroshi Murakami expressed gratitude to all the delegates and participants for attending the meeting, supporting UN-GGIM-AP, and contributing to the success of the Meeting. He thanked the Secretariat of UN-GGIM and the liaison organizations for the support to the meeting, and all the participants for the active participation and contribution to the discussions. The meeting was concluded.