



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

Established by a United Nations Resolution



## **UN-GGIM-AP EXECUTIVE REPORT**

**The Sixth Plenary Meeting of UN-GGIM-AP**

**16-19 October 2017**

**Kumamoto Prefecture, Japan**

### **Introduction**

This report highlights the activities carried out by the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP) since its Fifth Plenary Meeting held on 16-20 October 2016 in Kuala Lumpur, Malaysia.

### **The Fifth Plenary Meeting of UN-GGIM-AP**

The meeting was held in conjunction with the UN-GGIM International Forum on Policy and Legal Framework for Geospatial Information, and hosted by the Department of Survey and Mapping Malaysia (JUPEM). It was attended by about 100 delegates and observers from 30 countries and 5 international organizations. At the meeting, UN-GGIM-AP and its four working groups reviewed their activities since the Fourth Plenary, and discussed the challenges, priorities and work plans for next steps. The UN-GGIM Secretariat briefed on the latest activities and considerations of the UN-GGIM. The liaison organizations delivered status reports. The Statutes of UN-GGIM-AP were amended in accordance with the ECOSOC resolution adopted on 27 July 2016. The meeting adopted 5 resolutions, including 1) Geodetic Reference Frame; 2) Disaster Risk Management; 3) Regional SDI; 4) Cadastre and Land Management; and 5) International Forum on Policy and Legal Framework for Geospatial Information.

### **Side event 1: WG 1 Workshop on Geospatial and CORS Infrastructure**

UN-GGIM-AP WG1, the International Federation of Surveyors (FIG) and JUPEM jointly organized a 2-day workshop on Geospatial and CORS Infrastructure on 16-17 October, which was attended by 155 registrants (61 international) and invited 22 presenters to speak in the 6 sessions. The workshop discussed challenges and priority issues on geodetic reference frameworks for sustainable development, advocated the significance of geodetic infrastructure in addressing global challenges and implementing sustainable development goals, and shared knowledge, experience, techniques and good practices on the reference frames and GNSS CORS, as well as geospatial and geodetic infrastructure modernization.

### **Side event 2: WG 4 Workshop on Fit-For-Purpose and Social Tenure Domain Model**

UN-GGIM-AP WG4 and JUPEM jointly organized a half-day workshop on 17 October, intending to help member states better understand and design a fit-for-purpose approach to building sustainable land administration system, which was attended by 60 participants. It delivered interactive training with hands-on demos for STDM, and reported on the importance of good land administration and management in the implementation of global development agenda, and introduced the fit-for-purpose land administration.

## **UN-GGIM International Forum on Policy and Legal Framework for Geospatial Information**

The Forum was jointly organized by UN-GGIM-AP, the Secretariat of UN-GGIM and JUPEM, officiated by the Minister of Natural Resources and Environment Malaysia. It attracted 495 registered participants from over 30 countries. At the Forum, 16 speakers spoke to share unique experiences, practices, approaches and challenges towards the release of open data by geospatial agencies, discuss legal and regulatory framework regarding operations of unmanned aerial and vehicular systems, put forward unique data protection and privacy concerns associated with government geospatial information, and explore the licensing of geospatial information. The outcomes of all the discussions and debates were reflected in the Kuala Lumpur Declaration on Policy and Legal Frameworks for Geospatial Information. The Declaration was adopted by the UN-GGIM-AP Plenary. Its recommendations were later presented and adopted at the Seventh Session of UN-GGIM and the UN-GGIM WG on Policy and Legal Framework for Geospatial Information was established accordingly. The presentations of the Forum are available at the UN-GGIM website: <http://ggim.un.org/Kuala%20Lumpur%20Forum.html>.

## **Participation in the UN-GGIM Expanded Bureau Meetings**

UN-GGIM Expanded Bureau Meetings were held on 7-9 December 2016 and 2 August 2017 at the UN Headquarters in New York. Dr. Hiroshi Murakami, President of UN-GGIM-AP participated in the latter, while Dr. Li Pengde, Secretary of UN-GGIM-AP participated in both. They reported on the latest activities of the Committee, and contributed to the discussions of the meetings.

## **Executive Board Meeting on 4 April 2017 in Sydney, Australia**

The Executive Board meeting, hosted by Geoscience Australia, was held in Sydney, Australia on 4 April 2017, in conjunction with the 10th International Symposium on Digital Earth & Locate 17. The meeting reviewed the Committee's activities and progress after the Fifth Plenary Meeting of UN-GGIM-AP. Mr. Greg Scott, UN-GGIM Secretariat, was invited to give a brief overview of the latest activities of UN-GGIM, including the activities of UN-GGIM regional entities, WGs and Networks, and its next steps. Presentations were also made on the project of Geoscience Australia Asia-Pacific Trial of Second-Generation SBAS, and the Australia and New Zealand Cooperative Research Centre for Spatial Information (CRCSI). The meeting discussed nominations for the UN-GGIM Sub-Committee on Geodesy, and issues on strategic actions towards the upcoming events including the Kunming Forum on UN-GGIM, the Seventh Session of UN-GGIM and the Sixth Plenary Meeting of the Committee.

## **Kunming Forum on UN-GGIM**

The Kunming Forum on United Nations Global Geospatial Information Management (UN-GGIM), with the theme "Cities of the Future: Smart, Resilient and Sustainable" was jointly organized by UNSD as the Secretariat of the UN-GGIM, and the Government of China through the National Administration of Surveying, Mapping and Geoinformation (NASG) in Kunming, China, on 10-12 May 2017. More than 160 experts from 30 countries met to share experiences and methodologies on a number of contemporary topics to emphasize and explore the role and contribution of geospatial information in shaping and building smart, resilient and sustainable cities of the future. The technical sessions provided leading, innovative and encouraging ideas on the topics including: visioning the cities of the future; leveraging innovation and technology; emerging approaches and methods in data collection, mapping and modelling; integrative information systems and their growing analytical needs; geospatial information and services for disasters; cooperation and partnerships; capability and capacity development; and the geographic dimensions of the 2030 Agenda for Sustainable Development. The Summary Report and presentations are available at the UN-GGIM website: [http://ggim.un.org/Kunming\\_Forum.html](http://ggim.un.org/Kunming_Forum.html).

## **Side event: Third Meeting of the IAEG-SDGS Working Group on Geospatial Information**

The Meeting was convened on 8-10 May 2017 in Kunming, China and attended by 18 (out of the 23) members of the Working Group, 2 invited resources persons, 4 national experts and 2 staff members from UN-GGIM Secretariat. It provided with updates on recent developments including the Fifth Meeting of IAEG-SDGs in March 2017, reviewed and discussed progress and next steps of the IAEG-SDGS WG.

**UN-GGIM-AP/FIG/IAG/JFS Technical Seminar on Reference Frames in Practice**

This joint technical seminar of the UN-GGIM-AP, FIG, International Association of Geodesy and International Association (IAG), Japan Federation of Surveyors, International Committee for GNSS (IGC), Geospatial Information Authority of Japan (GSI) was held on 29-30 July 2017 before the IAG - IASPEI 2017 Symposium in Kobe, Japan, which attracted 68 delegates from 19 different countries. 21 quality presentations were delivered, including 4 presentations showing a manufacturer’s perspective from the event sponsors. This seminar’s objective was to provide fundamental geodetic reference frame background, concepts and examine the associated data and analysis techniques, each with a focus on practical implementation and application.

**International Seminar on Construction and Application of Spatial Data Infrastructure**

This International Seminar was held in Beijing (15-17 Sept. 2017) and Wuhan (18-22 Sept. 2017), organized by the National Geomatics Center of China, supported by NASG, UNGGIM-AP WG3 and ISPRS TC III. More than 80 participants from 10 countries/regions participated in the Seminar, among whom 21 came from Surveying and Mapping Agencies of Association of Southeast Asian Nations (ASEAN) and other developing countries. During the Beijing period, 12 top-level experts and scholars were invited to give lectures on the practices of construction, maintenance and application of SDI. The Wuhan period focused on academic aspects via 10 high-level International Workshops organized by ISPRS.

**Report to the Seventh Session of UN-GGIM**

The Seventh Session of UN-GGIM was held from 30 July to 4 August 2017 at the UN Headquarters in New York. Dr. Hiroshi Murakami, in his capacity as the UN-GGIM-AP President, reported on the major activities in the Asia and Pacific region, and proposed the key priority issues of the region for consideration by the Committee of the Experts.

UN-GGIM-AP held an informal meeting as a side event on 3 August during the Seventh Session of UN-GGIM. Over 40 participants from the Member States and the observing organizations attended the meeting. Discussed were the arrangements of the Sixth Plenary Meeting of UN-GGIM-AP and the Technical Training Workshop on Licensing of Geospatial Information to be held from 7-9 November 2017 in China.

**Personnel**

Mr. Gankhuu Tsevelsodnom, Mongolia, replaced Mr. Khurelshagai Ayurzana as Vice President. Mr. Hasan bin Jamil, Malaysia, replaced Mr. Ahmad Fauzi Nordin as EB Member. Mr. John SF Fabric, Philippines, became Vice Chair of WG2. Mr. Mehrdad Jafari Salim, Iran, replaced Dr. Alireza VafaeNeja as Vice Chair of WG3. The full list of the current Executive Board members and WG Chairs/Vice-Chairs are as below.

**The UN-GGIM-AP Executive Board as of October 2017**

President	Japan	Dr. Hiroshi Murakami
Vice Presidents	Korea	Dr. Choe Byong-Nam
	Mongolia	Mr. Gankhuu Tsevelsodnom
Secretary	China	Dr. Li Pengde

EB Members	Australia	Dr. John Dawson
	Brunei Darussalam	Mr. Ali Bakar Hj. Kasim
	Indonesia	Mr. Dodi Sukmayadi
	Iran	Dr. Alireza Azmoodeh Ardalan
	Malaysia	Mr. Hasan bin Jamil
	Singapore	Mr. Soh Kheng Peng

### The UN-GGIM-AP Working Groups as of October 2017

Working Group 1: Geodetic Reference Framework	Chair	Dr. John Dawson (Australia)
	Vice-Chair	Dr. Dang Yamin (China)
	Vice-Chair	Dr. Farokh Tavakoli(Iran)
	Vice-Chair	Mr. Basara Miyahara (Japan)
	Vice-Chair	Mr. Yi Sang Oh (Korea)
	Vice-Chair	Dr. Azhari bin Mohamed (Malaysia)
	Vice-Chair	Mrs. Enkhtuya Sodnom (Mongolia)
	Vice-Chair	Mr. Graeme Blick (New Zealand)
Working Group 2: Disaster Risk Management	Chair	Mr. Toru Nagayama (Japan)
	Vice-Chair	Dr. Tang Xinming (China)
	Vice-Chair	Mr. Adi Rusmanto (Indonesia)
	Vice-Chair	Mr. Peyman Baktash (Iran)
	Vice-Chair	Mrs. Munkhtsetseg Dalkhaa (Mongolia)
	Vice-Chair	Mr. Robert Deakin (New Zealand)
	Vice-Chair	Mr. John SF Fabic (Philippines)
Working Group 3: Regional SDI	Chair	Dr. Jiang Jie (China)
	Vice-Chair	Mr. Simon Costello (Australia)
	Vice-Chair	Mr. Mehrdad Jafari Salim (Iran)
	Vice-Chair	Mr. Lee Sangho (Korea)
	Vice-Chair	Ms. Bayarmaa Enkhtur (Mongolia)
Working Group 4: Cadastre and Land Management	Chair	Dr. Byung-Gul Lee (Korea)
	Vice-Chair	Mr. Ali Bakar Hj. Kasim (Brunei)
	Vice-Chair	Mr. Zhao Yousong (China)
	Vice-Chair	Mr. Solomon Nata (Fiji)
	Vice-Chair	Mr. Azamat Karypov (Kyrgyzstan)
	Vice-Chair	Dr. Teng Chee Hua (Malaysia)
	Vice-Chair	Mr. Gankhuyag Radnaabazar (Mongolia)
	Vice-Chair	Mr. Soh Kheng Peng (Singapore)

	Vice-Chair	Dr. Luu Van Nang (Vietnam)
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### **Working Group Activities**

**WG1 on Geodetic Reference Framework** aims to support Asia and Pacific countries to respond to the General Assembly Resolution on a Global Geodetic Reference Frame (GGRF) for Sustainable Development, and to facilitate regional geodetic cooperation.

1. WG1 supported the establishment of the UN-GGIM Sub-Committee on Geodesy.
2. WG1 has been liaising closely with UN-GGIM GGRF Working Group to ensure strong input from the Asia Pacific region, and supporting regional geodetic cooperation. The Asia Pacific Reference Frame (APREF) routine analysis of the APREF GNSS network has been updated to align the IGS14 reference frame.
3. WG1 continued the coordination of Asia Pacific Regional Geodetic Project (APRGP). The APRGP 2016 analysis report has been finalized and distributed to Member States. The APRGP 2017 Campaign ran from 17 to 23 September 2017.
4. WG1 have been partnering with the FIG, IAG and Pacific Geospatial and Surveying Council (PGSC) to develop regional geodetic workshops that support geodetic capacity building.
  - joint forum of UN-GGIM-AP, FIG and JUPEM on Geospatial and GNSS CORS Infrastructure on 16 - 17 October 2016 in Kuala Lumpur, Malaysia;
  - assisted PGSC with the development of their strategic plan, and will participate in the upcoming PGSC meeting in Suva, Fiji, in March 2018;
  - joint technical seminar of UN-GGIM-AP, FIG, IAG, Japan Federation of Surveyors, IGC and GSI of Japan on 29-30 July 2017 before the IAG-IASPEI 2017 in Kobe, Japan;
  - joint workshop of the GSI, FIG and UN-GGIM-AP entitled “Regional Challenges, Benefits and Opportunities of Exchanging Geodetic Data” alongside the Sixth Plenary Meeting of the Committee on 16 October in Kumamoto Prefecture, Japan.

**WG2 on Disaster Risk Management** aims to enhance the capability of NGIAs in Asia and the Pacific region for contributing to disaster risk reduction by applying geospatial information for effective implementation of Sendai Framework for Disaster Risk Reduction (SFDRR).

1. WG2 revised the draft potential area list for contribution of geospatial community including NGIAs to SFDRR implementation based on the comments to the preliminary version that arose from the Fifth Plenary Meeting of UN-GGIM-AP in October 2016. The revised list will be presented and discussed at the WG2 meeting of the Sixth Plenary Meeting.
2. WG2 analyzed the first questionnaire submitted by the Member States of UN-GGIM-AP, finalized the report to the 5th Plenary Meeting of UN-GGIM-AP and Best Practices (the first questionnaire), and published them on the website of UN-GGIM-AP in December 2016. This final report and Best Practices was also shared with the UN-GGIM WG-Disasters.
3. Based on the analysis results of the NGIAs’ best practices, which discovered diversity among the member nations, WG2 performed the Second Survey on Best Practices from February to April, 2017. A total of 18 Best Practices will be presented and discussed at the WG2 meeting of the Sixth Plenary Meeting.
4. WG2 examined the scheme and outline of the guidelines for elaboration based on the questionnaire results and the Best Practice Survey, and drafted the first version of the Guidelines, which are tabled for the WG2 meeting of this Sixth Plenary Meeting.
5. WG2 presented its activities and the linkage to the Strategic Framework on Geospatial Information and Services for Disasters to the side event “Geospatial Information and Services for Disasters” of the Seventh Session of UN-GGIM on 31 July 2017.

6. WG2 proposed to continuously encourage member states to share earth observation infrastructure, technology and data resources on a voluntary basis.

**WG3 on Regional SDI** aims to investigate and assess the status of NSDI development of the member countries in the Asia and Pacific region, and to identify common data and service standards for regional sustainable development.

1. WG3 made elementary analysis to the 10 received replies of the Questionnaire on the Current Status of Spatial Data Infrastructure in AP Region.

2. WG3 has involved in the ISPRS-UNGGIM Project on the Status of Topographic Mapping in the World which has led to interesting results. ISPRS decided to launch another questionnaire “The Current Status of Mapping in the World 2017” among the UN-GGIM Member States. WG3 will do further analysis based on the replies to this new questionnaire from UN-GGIM-AP members.

3. WG3 developed a new function of ‘Add layers’ to the pilot portal for Regional SDI Service Interoperation, which let users to overlay their own maps with the data from the SDI. Geospatial BNPB developed by Indonesia and WG 2 (term 2012-2015) for disaster management has been integrated into the portal. WG3 calls for members’ participating in the development of the portal.

4. WG3 continued its efforts in the connections with the UN-GGIM WG on Global Fundamental Geospatial Data Themes.

5. WG3 organized an International Seminar on Construction and Application of Spatial Data Infrastructure (15-22 Sept. 2017, China), in conjunction with the ISPRS 2017 Geospatial Week (18-22 Sept. 2017, Wuhan, China).

6. WG3 is co-preparing with the ISPRS Technical Commission Symposium on “Developments, Technologies and Applications in Remote Sensing”, on 7-10 May, 2018, Beijing.

**WG4 on Cadastre and Land Management** aims to promote land administration framework and good practices for the Asia and Pacific region. Main work steps are to identify land issues in the region, propose affordable framework and good practices for the region, and disseminate good practices and enhance training and capacity development.

1. WG4 carried out the first and second surveys to investigate the cultural, social, administrative and technical environments of the countries in the Asia and Pacific region. The analysis report has been completed.

2. WG4 carried out the analysis on Korea’s case of land information system construction, and proposed the draft of land management framework based on the case study. The framework consists of four reference models and the implementation related document details.

3. WG4 convened a workshop on Fit-For-Purpose and Social Tenure Domain Model (STDM) on 17 October 2016, as a side event of the Fifth Plenary of UN-GGIM-AP, to disseminate good practices and enhance training and capacity development.

### **Contribution to UN-GGIM**

UN-GGIM-AP has operated effectively in line with the mandate given by UN-GGIM, contributing to its activities and producing tangible outputs. The Committee has closely cooperated with UN-GGIM as well as the other regional committees, to ensure that the member states are well informed of and involved in the UN-GGIM work.

1. The Committee supported the UN-GGIM International Forum on Policy and Legal Framework for Geospatial Information, and contributed to the establishment of the UN-GGIM WG on Policy and Legal Framework for Geospatial Information.

2. The Committee substantively supported the UN-GGIM Working Group on Global Fundamental Geospatial Data Themes with regional activities of SDI interoperation.

3. The Committee shared the regional status and best practices of disaster risk management with the UN-GGIM WG on Disasters, and contributed to the First Global Consultation on “Strategic Framework on Geospatial Information and Services for Disasters”.
4. The Committee continued its efforts to support the development of GGRF Roadmap, and contributed to the establishment of UN-GGIM Sub-committee on Geodesy by nominating 10 Member States as members to the Sub-committee.
5. The Committee participated in the activities of the Inter-agency and Expert Group on Sustainable Development Goal Indicators Working Group on Geospatial Information (IAEG-SDGs: WGGI), and substantively supported the Third Meeting of IAEG-SDGs: WGGI.
6. The Committee contributed to the convening of the Kunming Forum on UN-GGIM held on 10-12 May 2017 in Kunming, China.
7. The Committee is supporting the preparation of the upcoming International Workshop on UN-GGIM – Licensing of Geospatial Information on 7-9 November 2017 in Tianjin, China.
8. The Committee actively participated in the work of the Expanded UN-GGIM Bureau, and identified and reported regional issues to the Seventh Session of UN-GGIM.

#### **Liaison Activities**

The Committee continued its liaison with other international organizations, including the International Federation of Surveyors (FIG), International Society for Photogrammetry and Remote Sensing (ISPRS), Technical Committee on Geographic Information of the International Organization for Standardization (ISO/TC211), International Cartographic Association (ICA), International Association of Geodesy (IAG), and etc., to jointly organize workshops and seminars, keep UN-GGIM-AP member states informed of the projects and conferences of these organizations, and encourage the members’ active participation.

The Committee strengthened its liaison with the Asia Oceania GEOSS and the United Nations Economic and Social Committee for Asia and the Pacific (UN ESCAP). Representatives of UN-GGIM-AP were sent to the Fifth Session of UN ESCAP on Disaster Risk Reduction in Bangkok, on 10-12 October 2017.

#### **Next Meetings**

The Seventh Plenary Meeting of UN-GGIM-AP will be held in November 2018 in China.

The Members are invited to host the future Executive Board and Plenary meetings of the Committee.