



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

**16 - 20 October 2016**

**Kuala Lumpur Malaysia**

### **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 the Twentieth United Nations Regional Cartographic Conference for Asia and the Pacific (UNRCC-AP) and the Fourth Plenary Meeting of UN-GGIM-AP held in Jeju, Republic of Korea from 6 -9 October 2015.

### **The Twentieth UNRCC-AP & the Fourth Plenary Meeting of UN-GGIM-AP**

**The Twentieth UNRCC-AP** was attended by 125 representatives of 27 countries and 10 specialized agencies, international organizations and other entities. Reports on progress of the Committee during the term of 2012-2015 were presented from UN-GGIM-AP and its three Working Groups. The keynote papers on achievements and developments in geospatial information management in addressing national, regional and global issues and on geospatial information for the global development agenda were delivered. The technical papers covering the themes of Geodetic reference framework, Disaster risk management, Regional SDI, and Cadastre and land management were presented and discussed. The Conference adopted 6 resolutions, including (1) Geodetic reference framework, (2) Disaster risk management, (3) Regional SDI, and (4) Cadastre and land management, (5) Strengthening the subsidiary machinery of ECOSOC in the area of geospatial information, and (6) Twenty-first United Nations Regional Cartographic Conference for Asia and the Pacific.

**The Fourth Plenary Meeting of UN-GGIM-AP** was held in conjunction with the Twentieth UNRCC-AP. The Meeting elected the new UN-GGIM-AP Executive Board Members for the term of 2016-2018, and established the four Working Groups of (1) Geodetic reference framework, (2) Disaster risk management, (3) Regional SDI, and (4) Cadastre and land management. The Meeting adopted three parts of amendment to the UN-GGIM-AP Statutes to set up two Vice Presidents for the Committee, and approved the Guidelines for Organizing UN-GGIM-AP Co-sponsoring and Supporting Events for trial implementation.

### **The UN-GGIM-AP Executive Board Meeting in May 2016**

The Executive Board meeting, hosted by Land Information New Zealand, was held in Christchurch, New Zealand on 6 May 2016, in conjunction with the FIG Working Week. The meeting reviewed the Committee's activities and progress after the Twentieth UNRCC-AP & the Fourth Plenary Meeting of UN-GGIM-AP. Mr. Greg Scott, UN-GGIM Secretariat, was invited to give a brief overview of the Fourth High Level Forum on UN-GGIM held in Addis Ababa, Ethiopia from 20-22 April 2016 and the ECOSOC's Programme Review of the Work of

UN-GGIM. The meeting discussed issues on strategic actions towards the upcoming events including the ECOSOC Session, the Sixth Session of UN-GGIM and the Fifth Plenary Meeting of the Committee.

### **Report to the Sixth Session of UN-GGIM & the UN-GGIM-AP Informal Meeting**

**The Sixth Session of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM)** was held from 1-5 August 2016 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.

**The UN-GGIM-AP Informal Meeting** was held as a side event on 4 August during the Sixth Session of UN-GGIM. The participants discussed the draft schedule and program of the Fifth Plenary Meeting of the Committee and the UN-GGIM International Forum on Policy and Legal Framework for Geospatial Information Management.

### **Personnel**

Mr. Peyman Baktash and Dr. Alireza Vafae Neja, Iran, became Vice Chair of WG2 and WG3. Dr. Byung-Gul Lee, Republic of Korea, replaced Dr. Sanghoon Lee as Chair of WG4. Before this plenary meeting, Mr. Khurelshagai Ayurzana of Mongolia resigned his post as Vice President due to domestic job change. Mongolia will nominate another representative as the replacement. 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 2016**

President	Japan	Dr. Hiroshi Murakami
Vice Presidents	Korea	Dr. Choe Byong-Nam
	Mongolia	TBD
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. Ahmad Fauzi Nordin
	Singapore	Mr. SOH Kheng Peng

### **The UN-GGIM-AP Working Groups as of October 2016**

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)
Working Group 3: Regional SDI	Chair	Dr. Jiang Jie (China)
	Vice-Chair	Mr. Simon Costello (Australia)
	Vice-Chair	Dr. Alireza VafaeNeja (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. Solomone 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)

### **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 has actively participated in and contributed to the development of the UN-GGIM Global Geodetic Reference Frame (GGRF) Roadmap document for the Sixth Session of UN-GGIM, to encourage a strong input from the Asia Pacific region and ensure that key elements relating to the development and sustainability of the GGRF meet the needs of the Asia and the Pacific region.
2. The chair of WG1 attended the 17th Annual World Bank Conference on Land and Poverty and participated in the session: Roundtable on Geodetic Reference Frames representing the UN-GGIM-AP. Discussions highlighted the importance of geodetic reference frames to meet the spatial data management needs of the World Bank and economic development in many countries.
3. WG1 continues its efforts to improve access to the GGRF while also supporting regional geodetic cooperation within the Asia Pacific region. The Asia Pacific Reference Frame (APREF) now incorporates GNSS data from a CORS network of approximately 620 stations, contributed by 28 countries in the Asia Pacific. Data are routinely processed by four Analysis Centres and made available publically.
4. The APREF project is supporting and helping member countries to contribute CORS data to the International GNSS Service (IGS) network by testing the data quality and site stability as well as following the IGS practice of maintaining site log files. Two CORS stations from Hong Kong, China and another two stations from Taiwan, China have recently been approved into IGS network.

Hong Kong, China now contributes six CORS stations to the APREF GNSS network while four stations from Taiwan, China are now being contributed.

5. The ongoing coordination of a regional GNSS campaign – Asia Pacific Regional Geodetic Project (APRGP). Annual GNSS APRGP campaign 2015 was conducted and an analysis report has been finalized and sent to the member countries. This year's campaign (APRGP2016) ran from 18 to 24 September 2016, and data assembly and analysis is now underway.

6. The Asia-Pacific Geodetic Capacity Building (APGCB) Project has continued. Specific activity has included:

- The International Seminar on Geodetic Reference Frame and Location Based Services was jointly held by UN-GGIM-AP and the National Administration of Surveying, Mapping and Geoinformation (NASG) of China from 24-27 November 2015 in Nanning, China.
- UN-GGIM-AP in collaboration with International Federation of Surveyors (FIG), International Association of Geodesy (IAG), International Committee on Global Navigation Satellite Systems (ICG) and New Zealand Institute of Surveyors (NZIS), held Seminar on Reference Frame in Practice: Reference Frames, Datum Unification and Kinematics at the 78th FIG Working Week in Christchurch, New Zealand, 1-2 May 2016.
- WG1 has continued to support the Pacific Geospatial and Surveying Council (PGSC) which represents the Pacific Island Countries.
- The Forum on Geospatial and GNSS CORS Infrastructure will be undertaken from 16-17 October 2016 in Kuala Lumpur, Malaysia, jointly held by UN-GGIM-AP, FIG and JUPEM.

**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). WG2 activities implemented include; a questionnaire survey to investigate roles of disaster management authorities and NGIAs, and to explore potential collaboration areas based on geospatial information; and collecting best practices and others.

1. WG2 discussed possible action items in the SFDRR to which geospatial information is likely to contribute. Based on the discussion results, a list of practices will be made to find out which items NGIAs might engage in.

2. WG2 conducted a survey to the UN-GGIM-AP member states with the major items of general issues on disaster risk reduction, organization activities, geospatial information management for disaster risk reduction, challenges, solutions and future prospects, best practices as well as further plans. Currently, the answers from 14 countries have been analyzed and the summary report has been almost completed.

3. WG2 collected and produced a series of best practices on the use of geospatial information for disaster risk reduction. Currently 14 practices from 10 countries are collected.

4. WG2 continued its efforts in encouraging Member States to share earth observation infrastructure, technology and data resources for disaster management on a voluntary basis by collecting examples on this matter.

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

1. WG3 designed a questionnaire on the status of NSDI development of the member countries, with focus on access, management, update, web-based services and sharing of data/service. The questionnaire has been distributed to the member countries in June 2016. Eight replies have been received by September 2016. An elementary analysis has been done based on the received responses.

2. WG3 helped to organize the 1st ISPRS-UNGGIM National Mapping and Cadastral Agencies Forum during the ISPRS Congress in Prague on July14-15, 2016. Representatives from the National Mapping and Cadastral Agencies worldwide took part in the Forum and shared the scientific, technical and application issues.

3. A pilot portal for Regional SDI Service Interoperation (<http://192.9.104.116:8889>) has been established by China, which can integrate on-line services released by different agencies and countries based on OGC standards. It successfully integrated the services published in Geospatial BNPB, the website developed by Indonesia and WG2 on disaster management in the term 2012-2015. Further efforts will be made to provide the URLs of the on-line services so that users can integrate the services into their own systems, and provide menus to let users publish map layers or services via the Portal. Participation in improving the Portal is expected, including providing URLs that can be integrated into the Portal and helping to evaluate and validate the information published in the Portal. Comments and suggestions are welcome to improve the Portal.

4. Australia has conducted pilot projects with some countries to test the mechanisms of sharing data under pre-drafted rules and integrate web-based services/portals for the interoperation of the NSDIs.

**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 1st survey for investigating 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 learned some important lessons. Based on the case, the draft of land management framework was prepared. The final result will be considered as basic analysis materials for developing framework and good practices for the Asia and Pacific region.

3. In order to prepare a technical document in accordance with the international standards, the investigation on related techniques was conducted by WG4, including ISO Standards, FIG Publications, Cadastral.org and etc.

4. The Regional workshop on Fit-For-Purpose and Social Tenure Domain Model (STDM) contributed by Malaysia Vice-Chair of WG4 will be held in conjunction with UN-GGIM-AP Plenary meeting on 17 October 2016 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.

The Committee actively took part in the whole consultative process leading up to the ECOSOC's Programme review of the work of UN-GGIM, and to the adoption of the ECOSOC resolution on 27 July 2016 to strengthen institutional arrangements on geospatial information management. Australia, China, and Japan from the Asia and Pacific region participated in the facilitation and submission of the draft resolution. According to the resolution, the UNRCC-AP ceases forthwith and the mandates and obligations are assumed by UN-GGIM at the global level, and its technical and substantive activities at the regional and national level assumed by UN-GGIM-AP.

The Committee nominated regional representatives to participate in the UN-GGIMWG on

Fundamental Data led by the UN-GGIM: Europe, UN-GGIM WG on Geospatial Information and Services for Disasters, as well as the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) WG on Geospatial Information.

The Committee substantively supported the 4th High Level Forum on UN-GGIM and the 6<sup>th</sup> Session of UN-GGIM, actively participated in the work of the expanded UN-GGIM Bureau, and supported UN-GGIM capacity building efforts and knowledge base development. The Committee also continued its efforts to identify and report regional issues to the annual UN-GGIM Session.

### **Liaison Activities**

The Committee liaised 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.

### **Next Meetings**

The Sixth Plenary Meeting of UN-GGIM-AP is going to be held in Japan in 2017.

The Members are invited to host the UN-GGIM-AP EB Meeting in the first half of 2017, and the EB Meeting and the Plenary Meeting of UN-GGIM-AP in 2018.