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

## 1. Summary

1. This report provides activities carried out by the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP) since the last report submitted to the Third Session of the United Nations Committee of Experts on Global Geospatial Information Management held in Cambridge, United Kingdom from 24-26 July. The report highlights the Committee's three working groups' activities and proposes the key priority issues for Asia and the Pacific Region that should be considered by the Committee of Expert.

## 2. Background

2. UN-GGIM-AP was established on 1 November 2012 on the basis of the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP), in accordance with the Resolution adopted at the Nineteenth United Nations Regional Cartographic Conference for Asia and the Pacific (UNRCC-AP). UN-GGIM-AP inherits exactly the same missions and membership as those of PCGIAP.

3. As the representing body of the National Geospatial Information Authority of 56 countries and regions in Asia and the Pacific region, the committee aims to promote the unique needs and interests of the region globally while cooperating with other regional and global entities.

## 3. Activities

#### 3.1 Contribution to UN-GGIM Activities

4. UN-GGIM-AP Working Group 1 (WG1) on Geodetic Reference Framework for Sustainable Development has been closely involved and supported UN-GGIM activities through contribution to the UN-GGIM Global Geodetic Reference Frame Working Group. The WG1 specifically assisted with the development of the draft UN-GGIM Concept Note, the draft Geodesy resolution, Geodesy the Fact sheet, the Geodesy presentation, and the UN-GGIM Geodesy Animation (see https://vimeo.com/89695290).

5. UN-GGIM-AP Working Group 3 (WG3) on Place-based Information Management for Economic Growth conducted the analysis of the UN-GGIM questionnaire on the current status of mapping in the world with focus on Asia and the Pacific countries/regions under the authorization by Prof. Gottfried Konecny.

6. Also, UN-GGIM-AP substantively supported UN-GGIM International Workshop on Integrating Geospatial and Statistical Information held in Beijing, China, from 9-12 June 2014. The Workshop discussed the development of a global statistical-geospatial framework and shared country experiences that the national geospatial information authorities have derived from meeting the specific needs of census geography/cartography and statistical analysis, and their overall cooperation with national statistical offices. The participants affirmed the importance of geography and geospatial information to census activities, and for collecting, processing, storing, integrating, aggregating, and disseminating the data on appropriate platforms.

#### 3.2 Working Group Activities

7. Three working groups on geodetic reference framework for sustainable development,

data sharing and integration for disaster management, and place-based information management for economic growth continues its activities based on 2012-2015 work plan. This part summarizes activities of the each working group.

8. Working Group 1 on Geodetic Reference Framework for Sustainable Development is chaired by Dr. John Dawson (Australia) and tasked to facilitate cooperation in geodetic data sharing amongst national agencies in order to build a common geodetic reference framework across the region and the project priorities.

9. WG1 continues its activities on Asia Pacific Reference Frame (APREF) Project, Asia Pacific Regional Geodetic Project (APRGP), Asia Pacific Regional Height System Unification (APRHSU) Project, and Asia-Pacific Geodetic Capacity Building (APGCB) Project.

10. APREF project is now incorporating Global Navigation Satellite System (GNSS) data from a Continuously Operating Reference Stations (CORS) network of approximately 550 stations contributed by 28 countries in the Asia Pacific. The stations have increased from 480 since 2013. Data are routinely processed by three Analysis Centres and made available publically.

11. Along with APREF project, APRGP Annual GNSS campaign was carried out from 8 September to 14 September 2013. Data were contributed from twelve countries. The data set has been uploaded to the ftp link: ftp://ftp.ga.gov.au/geodesy-outgoing/apref/APRGP/2013/. The analysis of the data set is complete. In 2014, GNSS campaign (APRGP2014) is planned for Sunday 7 September to Saturday 13 September 2014, inclusive.

12. The APRHSU Project established the steering committee, chaired by Dr. Jayhyoun Kwon (Republic of Korea). The project conducted a questionnaire on height systems and to date twelve responses have been received from government agencies or organizations responsible for the vertical reference systems. Initial analysis on APRHSU questionnaire has been completed. The future action of the project will include: redistribution of the questionnaire, distribution of the analysis, development of an optimal methodology for height system unification, development of standards for vertical references systems, and development of a web-based map for accessing products from APRHSU.

13. Aimed at geodetic capacity building in the Asia Pacific, APGCB Project involved in a number of regional workshops including: the Reference Frame in Practice Symposium (Manila, Philippines 21-22 June 2013), the FIG Pacific Small Island Developing States Symposium (Suva, Fiji 18-20 September 2013), and FIG Commission 5 Special Technical Forum – UN-GGIM-AP/FIG/IAG/UN-ICG Reference Frames in Practice - The Future held during the XXV FIG International Congress (Kuala Lumpur, Malaysia 18 June 2014).

14. In addition to above activities, as mentioned in the previous sections, WG1 has been closely involved and supporting the UN-GGIM activities on global geodetic reference frame.

15. Working Group 2 on Data Sharing and Integration for Disaster Management is chaired by Mr.Peyman Baktash (Iran). WG2 carries on projects to support data sharing for disaster management, including research to identify user requirements associated with risk assessment, preparedness planning, rescue and recovery.

16. WG2 completed its investigation of disaster management geoportals at national and regional levels. In its investigation, the architectures of Geoportals including Indonesia, India, Europe (INSPIRE) and ESRI were mainly studied.

17. WG2 also investigated the two case studies, flood and earthquakes and clarified required data for disaster management Geoportals.

18. Based on the findings of these investigations, WG2 has started its considerations to

develop an appropriate guideline and the process of developing architecture towards implementation of a regional Geoportal for disaster management.

19. Working Group 3 on Place-based Information Management for Economic Growth is chaired by Dr. Jiang Jie (China) and conducts projects to encourage national geospatial information authorities in the region to utilize and share geospatial information through web/cloud based platforms and other smart based services as well as to support development of a legal framework required to support the integration, sharing, access to and dissemination of this emerging place-based data.

20. WG3 continues its activities on the user requirement analysis, and case studies on measurement of return on investment for Australia, the case study on web-based distributed geo-data management and on-line services in China, and the studies on fast acquisition and update of place-based data in Malaysia.

Funding has been provided from the Ministry of Commerce of China for the training of the Global web-based geoinformation services for the developing countries. In addition, WG3 has approached for funding from the special fund of the regional cooperation in Asia and Pacific regions for capacity building projects.

21. WG3 has closely cooperated with ISPRS to support the symposium on "GeoSpatial databases and location based services" which was held in Suzhou, China from 14-16 May, 2014.

22. In addition to above activities, WG3 has supported the analysis of the UN-GGIM questionnaire on the current status of mapping in the world with focus on Asia and the Pacific countries/regions

## 4. Regional Priority Issues

23. Priority issues of the Asia-Pacific region were collected from the UN-GGIM-AP member countries through a questionnaire, which was distributed in November 2013. As of May 2014, priority issues from 13 member countries were received.

24. Among these various issues, the UN-GGIM-AP Executive Board has selected two core priority issues. UN-GGIM-AP requests that the following two issues to be addressed and discussed by the Committee of Expert: (i) Disaster Management and (ii) Working towards Sustainable Development Goals (SDGs) and post Millennium Development Goals (MDGs).

- i. Disaster Management
  - Promoting the development of disaster management geoportals.
  - Identifying the inputs to the World Conference on Disaster Risk Reduction (WCDR).

Reference document: Hyogo Framework for Action (HFA): HFA Para 17 states: "Develop, update periodically and widely disseminate risk maps and related information to decision-makers, the general public, and communities at risk in an appropriate format."<sup>1</sup>

- ii. Working towards SDGs and post MDGs
  - Identifying inputs to SDGs and post MDGs.
  - Promoting an appeal to SDGs and MDGs communities.

Reference document: Future We Want: Para 274 states: "We recognize the importance of space-technology-based data, in

<sup>&</sup>lt;sup>1</sup> See A/CONF.206/L.2/Rev.1

situ monitoring and reliable geospatial information for sustainable development policymaking, programming and project operations."<sup>2</sup>

## 5. Partnership, Regional and International Collaboration

25. UN-GGIM-AP continues to work to build partnership with regional and international organizations through participation to the various forums at regional and global levels and exchange of views and best practices.

26. The Committee members participated in the 10th United Nations Regional Cartographic Conference for Americas (UNRCC-A) held in August 2013 and the Meeting of the UN-GGIM for the Arab States held in February 2014. The representatives of the Committee presented papers and shared the experiences of the Committee's successful transition from PCGIAP to UN-GGIM-AP with regional audiences.

27. The Committee, in collaboration with International Federation of Surveyors (FIG), held joint geodetic capacity building forums and sessions at the FIG Pacific Small Island Developing States Symposium in Fiji in September 2013, and the XXV FIG International Congress in Malaysia in June 2014.

28. In an attempt to establish closer cooperation between United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), the Committee proposed to set up the Committee's mirror site at the ESCAP website.

29. The Committee continues to maintain close relationship with other liaison organizations including FIG, ISO/TC 211, International Steering Committee for Global Mapping (ISCGM), and EuroGeographics through participation to the meetings and submission of the liaison reports.

## 6. Future Plans

30. The future meetings of UN-GGIM-AP are planned as follows:

- The 3rd Plenary Meeting (10-12 November Bali, Indonesia, 2014)
- Executive Board Meeting (2015)
- The 4th Plenary Meetings in conjunction with the 20th United Nations Regional
- Cartographic Conference for Asia and the Pacific (Republic of Korea, 2015)

31. UN-GGIM-AP members will continue to actively contribute to the work of the UN-GGIM and take necessary actions upon requests by the Committee of Experts.

<sup>&</sup>lt;sup>2</sup> See A/CONF.216/L.1