

## **Introduction**

The 17<sup>th</sup> United Nations Regional Cartographic Conference for Asia and the Pacific (UNRCC-AP) and the 12<sup>th</sup> Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP) meeting were convened in Bangkok, Thailand on 18-22 September 2006. The meetings were held at the Conference Centre of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) facility.

The Conference theme was “*Geo-information integration for disaster management and sustainable development in the context of the millennium development goals*”.

The meetings proceeded despite the coup in Thailand. Although the UNESCAP facility was closed on Wednesday 20 September, UNRCC-AP and PCGIAP business was able to be concluded over four days.

The UNRCC-AP is convened every three years. The last Conference was held in Okinawa, Japan in 2003. PCGIAP meets annually, and each three years in conjunction with the UNRCC-AP.

The Conference was attended by 210 representatives of 30 countries, specialised agencies and international scientific organisations, and invited speakers.

The Australian delegation to the Conference comprised Mr Peter Holland, Geoscience Australia (head of delegation); Mr Paul Kelly (ASIBA); Prof. Ian Williamson, Dr Abbas Rajabifard, Mr Andrew Binns and Mr Hossein Mohammadi, University of Melbourne; Ms Kim Williamson, Australian National University; and, Mr John Manning.

## **Conference opening and invited papers**

The Conference elected Peter Holland as President, Mr Li Weisen (China) as Vice President and Mr Yaguchi Akira (Japan) as Rapporteur.

In his opening statement to the Conference, Mr Paul Cheung, Director of the United Nations Statistics Division, recognised the progress made by PCGIAP in establishing a spatial data infrastructure (SDI) for Asia and the Pacific. Mr Cheung noted that recent technological developments such as high-resolution sensors, global positioning systems (GPS), geographic information systems (GIS), location-based services and web-based tools are revolutionising the spatial sciences. Geographic data are now more easily collected, manipulated, and disseminated, and integrated with other data such as demographic and socio-economic data to help create relevant information for better decision-making. Mr Cheung noted that the major barriers and impediments to harnessing geographic information are not technical ones but rather institutional and organisational ones. Mr Cheung concluded by describing several United Nations activities that are promoting the use of geographic information.

Days one and two of the Conference were mainly taken up with reports by PCGIAP and invited papers. These papers included:

- Data preparedness and emergency response, by Mr Craig Williams of the Office for the Coordination of Humanitarian Affairs;
- Capacity building in geo-information, by Prof. Milan Konecny, President of the International Cartographic Association (ICA);
- Institutional development in land administration, by Prof. Stig Enemark, International Federation of Surveyors;
- Capacity development for a global spatial data infrastructure, by Prof. Bas Kok, GSDI Association;
- Global mapping and disaster management, by Prof. Fraser Taylor, Chair of the International Steering Committee for Global Mapping (ISCGM);
- Photogrammetry and remote sensing for disaster management, by Prof. John Trinder, International Society for Photogrammetry and Remote Sensing;
- The contribution of international standards and SDI to disaster management, by Mr Olaf Ostensen, Chairman of International Standards Organisation Technical Committee 211 (ISO TC/211);
- Launch of the atlas of disaster risk, by Mr Altaf Musani, World Health Organisation (WHO);
- Issues from Pacific Islands on disaster preparedness, by Mr Kemeuli Masikerei, Chair PCGIAP Pacific Islands Group;
- Regional and national SDI in the Americas, by Mr Luis Alegria, Vice-President of PC-IDEA (the permanent committee for the Americas);
- Spatially enabling government, by Prof. Williamson; and
- ALOS mission and disaster management and sustainable development, by Mr Kazuo Ohta, Japanese Aerospace Exploration Agency.

## **Workshops and technical committees**

Day three of the Conference was particularly busy, the Conference having lost a day because of the coup.

The morning session comprised two workshops:

- Use of geo-information for mitigating large scale disasters and attaining sustainable development, co-organised by PCGIAP, ISCGM and ICA; and
- Integration of built and natural environment datasets within national SDI initiatives, organised by the PCGIAP working group on the cadastre, and chaired by Prof. Williamson.

The workshops included twenty-plus invited papers and discussion sessions.

The afternoon session comprised three parallel technical committees titled:

- GIS, remote sensing and geodesy for disaster management;
- SDI capacity building and their development in Asia and the Pacific; and
- Geospatial fundamental data, including their collection, management and dissemination.

The purpose of these technical committees was to provide delegates with the opportunity to discuss all that they had heard at the Conference and to formulate resolutions for presentation and debate at the final plenary session.

## **Election of PCGIAP executive board**

Day four of the Conference, its final day, was mainly taken up with the election of the PCGIAP Executive Board, and consideration of resolutions.

President, Vice President and Secretary of PCGIAP were elected unopposed. Nine other board members were elected from ten nominees.

The PCGIAP Executive Board for the period 2006-2009 is:

- President, Australia (Mr Peter Holland, General Manager, SIIAF/GEM, Geoscience Australia);
- Vice President, Japan (Mr Yaguchi Akira, Director-General, Geographical Survey Institute - GSI);
- Secretary, China (Mr Li Weisen, Deputy Director-General, State Bureau of Surveying and Mapping);
- Brunei Darussalam (Hj. Mohd. Jamil Ali, Surveyor-General, Survey Department, Ministry of Development);
- Fiji (Mr Barma Nand, Director, Mapping and Land Information, Ministry of Land and Mineral Resources);
- India (Maj. Gen. Gopal Rao, Surveyor-General, Survey of India);
- Indonesia (Mr Bebas Purnawan, National Coordination Agency for Surveys and Mapping - Bakosurtanal);
- Republic of Korea (Mr Sohn Bong Gyun, President, National Geographic Information Institute);
- Malaysia (Dato Hamid bin Ali, Director General, Department of Survey and Mapping);
- Philippines (Mr Diony Ventura, Administrator, National Mapping and Resource Information Agency);
- Singapore (Mr Soh Kheng Peng, Chief Surveyor, Singapore Land Authority); and
- Russian Federation (Mr Alexander Prusakov, Vice President, Federal Service of Geodesy and Cartography of Russia).

## **Conference resolutions**

The Conference adopted six technical resolutions and one procedural resolution. The resolutions will be presented to the United Nations Economic and Social Commission (ECOSOC) for ratification.

Resolution 1 - Geo-information for mitigating large scale disasters. This resolution seeks support from PCGIAP and national mapping organisations to collect and provide geo-information on disaster-affected areas; to apply best practices in the development of appropriate geo-databases and applications; to use remote sensing imagery such as ALOS with other datasets in regional applications; and to coordinate their activities in disaster monitoring and management with, for example, ISCGM and United Nations activities. The resolution also calls for collaboration amongst regional and global groups involved in the development of geo-information in regards to

promotion of use of geographic information. The resolution finally calls on PCGIAP to arrange a workshop on monitoring earthquake and tsunami hazards, involving experts from relevant disciplines, and involving participants from developing countries (particularly Pacific Island countries), in Fiji at the time of the proposed GSDI/PCGIAP meetings in 2008.

Resolution 2 – Regional geodesy. This resolution calls for enhancement of the regional geodetic infrastructure to contribute to disaster monitoring, warning and post-event reconstruction through co-operative observations of crustal deformation and plate monitoring; transfer of GPS technology to nations in need through annual observation campaigns and sharing of analysis techniques; promotion of new geodetic adjustment techniques and datum change transformation parameters to allow regional spatial data integration; and, expansion of continuous GPS installations in areas of earthquake and tsunami hazards and sharing of data for scientific study and warning systems.

Resolution 3 – Marine administration. This resolution calls for countries with a marine jurisdiction to include a marine administration component in a seamless national SDI covering land and water areas; and, PCGIAP to continue investigations into marine cadastre, marine SDI and the spatial dimension of marine administration and ocean governance.

Resolution 4 – SDI to support spatially-enabled government. This resolution calls for countries to pursue the integration of built and natural environment datasets in support of sustainable development; and, PCGIAP to investigate the concept of spatial enablement of government, and assist countries in re-engineering their SDI.

Resolution 5 – Fundamental data. This resolution recommends that PCGIAP extend the pilot project on seamless fundamental datasets of disaster-prone areas; countries support the ISCGM-managed global mapping project and the WHO second-level administrative boundary project; and, PCGIAP work with ISO TC/211 in the development of a metadata profile for the Asia and Pacific region.

Resolution 6 – Timor Leste SDI. This resolution recommends that the Government of Timor Leste, PCGIAP, the United Nations Department of Peacekeeping Operations and other international efforts collaborate in building the SDI of Timor Leste.

Resolution 7 – 18<sup>th</sup> UNRCC-AP. This resolution recommends to ECOSOC that the 18<sup>th</sup> UNRCC-AP be held in 2009.

## **PCGIAP working groups and meetings**

The PCGIAP Executive Board met at the conclusion of the Conference. The Board agreed to establish four working groups to implement the resolutions of the 17<sup>th</sup> UNRCC-AP:

- Working group 1 on regional geodesy, chaired by Japan (Dr Shigeru Matsuyama, GSI);
- Working group 2 on regional fundamental data, chaired by Indonesia (Mr Bebas Purnawan);

- Working group 3 on spatially-enabled government, chaired by Australia (Prof. Ian Williamson); and
- Workshop 4 on capacity building, chaired by India (Maj. Gen. Gopal Rao).

The 13<sup>th</sup> meeting of PCGIAP will be held in Korea mid-2007, and the 14<sup>th</sup> meeting of PCGIAP in Fiji in 2008. The PCGIAP Executive Board next meets in Hyderabad India in January 2007 at the time of the Map World Forum.

## **Conclusion**

Although relatively small in numbers compared with previous UNRCC-AP the Australian delegation played a major part in the Conference. Australia chaired the Conference and delegates actively participated in Conference debate. Australia chaired one of the Conference workshops and delegates were directly involved in the drafting of most of the technical resolutions endorsed by the Conference. These resolutions are relevant, for the most part, to the interests of Australia.

Australia was elected unopposed to take on a second term as President of PCGIAP for the period 2006-09, and chairs an important working group of PCGIAP dealing with spatially-enabled government.

There are significant opportunities for Australian organisations to respond to the Conference resolutions and participate in the PCGIAP workplan.

## **Acknowledgement**

The author of this report acknowledges the efforts of the Australian delegation to the Conference, and the support of ANZLIC, OSDM, ICSM, PSMA, ASIBA, ASIARA, CRCSI, SSI and other organisations in the preparation of the Australian country report to the Conference.

## **References**

Conference papers can be found at the United Nations Statistics Division website <http://unstats.un.org/unsd/geoinfo/17thunrccapdocuments.htm>

This report can be found at <http://www.ga.gov.au/nmd/asdi/unrcc06.jsp>