

**Report to the 43rd General Assembly
FIG Working Week 2020, Amsterdam, the Netherlands**



International Fédération of Surveyors
Fédération Internationale des Géomètres
Internationale Vereinigung der Vermessungsingenieure

Asia Pacific Capacity Development Network



1. Summary

The Asia Pacific Capacity Development Network (AP CDN), through its dedicated team and partners, has had an active year developing the capabilities of geodetic survey professionals to modernise geospatial reference systems, meet future challenges and to sustain a Global Geodetic Reference Frame. More specifically advocating the importance of modernising a geodetic datum; supporting the establishment of GNSS CORS and positioning infrastructure; demonstrating the benefits of continued collaboration; and solving challenges associated with geodetic data sharing, organisational planning, legislative and policy matters, disaster risk management and building resilience.

In addition to this the “Network” has promoted to countries that organisational change, capacity building and action planning, under the guidance of the UN GGIM Integrated Geospatial Information Framework (IGIF), will reduce the digital divide and technological gap between the developed and emerging economies, and also assist a country to achieve the Sustainable Development Goals.

2. Network Committee Members / Affiliations

- Dr. Matt Amos - International Association of Geodesy (IAG), Land Information New Zealand (LINZ)
- Mr. Neil Ashcroft - Leica Geosystems
- Ms. Rosamond Bing – Pacific Geospatial Survey Council (PGSC) Chair, Tonga Gov.
- Mr. Graeme Blick - UN SubCommittee on Geodesy (SCoG), Land Information New Zealand
- Mr. Nicholas Brown – UN SCoG Co-Chair Geoscience Australia
- Ms. Allison Craddock - UN SCoG– Education Training and Capacity Building (ETCB), IGS, JPL NASA
- Dr. John Dawson - UN GGIM AP, Geoscience Australia
- Mr. Nic Donnelly - FIG Commission 5, LINZ
- Mr. Viliami Folau - PGSC, Tonga Gov.

- Ms. Sharafat Gadimova – UN Office of Outer Space Affairs International Committee on GNSS (OOSA ICG)
- Ms. Meizyanne Hicks - PGSC Vice Chair
- Mr. Matt Higgins – FIG Commission 5
- Dr. Ryan Keenan – UN SCoG – ETCB
- Mr. Andrick Lal - PGSC, Pacific Community
- Mr. Mikael Lilje - FIG Vice President
- Dr. Suelynn Choy – FIG Commission 5, IAG
- Mr. Basara Miyahara - UN GGIM AP, GGOS, Geospatial Information Authority of Japan
- Mr. Gerry Ong - President ASEAN Flag
- Mr. Chris Rizos – President-Elect IUGG
- Mr. Rob Sarib - Chair of FIG AP CDN, Surveying and Spatial Sciences Institute
- Mr. Asakaia Tabua - PGSC, Fiji Gov.
- Ms. Molly Powers-Tora - PGSC, Pacific Community
- Mr. Randolph Vicente – Hon. President ASEAN Flag

3. Events

The Network members have actively participated, presented and provided technical advice through Reference Frame in Practice seminars, high level meetings / discussions, and workshops; namely at the following events –

- “Workshop on the Applications of Global Navigation Satellite Systems” held in Suva, Fiji, June 2019. Organized by the University of the South Pacific (USP) and the United Nations Office for Outer Space Affairs (UNOOSA) and the International Committee on Global Navigation Satellite Systems ICG). <https://www.unoosa.org/oosa/en/ourwork/psa/schedule/2019/2019-workshop-on-global-navigation-satellite-systems-presentations.html>
- “South East Asia Survey Congress held in Darwin, Australia, August 2019. Organised by SSSI and ASEAN Flag - <https://seasc2019.paperlessevents.com.au/sessions/>
- “Digital Twin, Smart Cities and Smart Land Information” held in Seoul, Korea, August 2019. Organised by FIG Commission 7 and LX Korea.
- “International Workshop for the Implementation of the Global Geodetic Reference Frame in Latin America” held in Buenos Aires, Argentina, September 2019. Organised by the IUGG and UNOOSA ICG. http://www.sirgas.org/en/ggrf/ggrf_presentations/
- “UN GGIM AP 8th Plenary Meeting” held in Canberra, Australia November 2019. Organised by Geoscience Australia and United Nations Economic and Social Commission for Asia and the Pacific. <https://www.un-ggim-ap.org/meetings/pm/8th/201911/8thPlenary.shtml>

It is anticipated that Network members and partners, in first half of 2020, will endeavour to attend –

- Disaster Risk Reduction and Resilience events
 - UN GGIM WG Disasters Conference 2020 in Tokyo on 25-27 February 2020 - <https://ggim-tokyo-2020.github.io/>

- GTEWS (GNSS Tsunami Early Warning System) Workshop / Geodesy 4 Sendai Activity on 1-5 June 2020, Sendai – Japan (facilitated by the GEO Community)
<https://geodynamics.org/cig/events/calendar/gnss-workshop-2/>
- Pacific Geospatial Surveying Council (PGSC) and Pacific Community
 - “Peer to Peer Exchange on the IGIF”, hosted by Tonga and UN GGIM, during week beginning 27 March 2020.
 - PGSC Annual meeting to coincide with the above.
- UN OOSA ICG / Mongolia Government are hosting a Workshop on the Applications of GNSS from 13 - 17 April 2020 in Ulaanbaatar, Mongolia.
<http://www.unoosa.org/oosa/en/ourwork/psa/schedule/2020/2020-un-mongolia-workshop-on-the-applications-of-gnss.html>
- LOCATE 2020 conference 28- 30 April 2020, hosted by SSSI in Brisbane, Australia
<https://www.locateconference.com/2020/>

4. Communication and publications

Reports on the outcomes / activities from events, as well as news and publications, can be found at the FIG AP CDN website - http://www.fig.net/organisation/networks/capacity_development/asia_pacific/index.asp or alternatively on the event organiser’s website.

Please note, the support and assistance from the FIG Office to organise events, and to manage and administer the network webpages is greatly appreciated.

5. Future Activities

The Network and its partners will continue to provide assistance to countries involved with building the capacity and capabilities of geodetic and geospatial surveyors through three levels –

- Professional development
- Institutional development
- Global development

and will endeavour to -

- Promote and create an awareness of the geodetic / geospatial profession through an effective technology-based marketing campaign
- Evaluate the geodetic / geospatial capability – status, determine immediate needs, future core capabilities, educational and training requirements, institutional curriculum, mutual recognition of qualifications
- Develop mechanisms to access and exchange information and experience with respect to geodetic / geospatial technical developments, data management, operations, applications
- Create opportunities for professional development, mentoring, sponsorship
- Provision of “advice” through workshops, forums, meetings, seminars
- Continue collaboration with UN GGIM Asia Pacific – Geodetic Reference Frames working group, UN SCoG, UN OOSA ICG, and the IAG.

- Form alliances with “like-minded agencies”, professional / scientific organisations, academic / educational institutions, and international agencies.
- Support the development of a **Global Geodetic Centre of Excellence** to support the ongoing development of geodetic surveyors and earth scientists.
- Work with FIG African Regional Network to augment GNSS CORS and Positioning Infrastructure