



FIG Commission 5 in South East Asia, Manila – Philippines

Mikael Lilje and Rob Sarib

FIG Commission 5 actively participated in 2 events in this unique region to represent our membership and to raise the profile of the Commission. The two events held in Manila were –

- South East Asia Survey Congress (SEASC)
- Reference Frame in Practice Technical Seminar (RFIP TS)



SEASC was held at the Philippine International Convention Centre (PICC). It attracted 665 guests comprising of local surveyors, international registrants from different countries in the Asia Pacific region, corporate sponsors and administrative / technical support. There were 15 plenaries and 85 technical presentations all of which were related to the theme “Geospatial Cooperation Towards a Sustainable Future”. The National Mapping and Resource Information Authority (NAMRIA), and Philippine Engineering and Geomatics Society (PhilGEGS) organised this congress for the ASEAN Federation of Land Surveying and Geomatics.



FIG Commission 5 Chair, Mikael Lilje, was heavily involved in the SEASC program. Mikael delivered several presentations, and with Vice Chair of Administration Rob Sarib both were actively involved in subsequent discussion forums on behalf of FIG and Commission 5. These were –

- A plenary presentation about the contributions, roles and functions of Commission 5 towards geospatial co-operations for a sustainable future in the region.
- An overview presentation of Commission 5 and its activities to the Philippine Young Surveyors Forum
- Technical input into the round table discussions on Strengthening Disaster Risk Reduction Management in the ASEAN Region by highlighting the technical papers and publications previously done by FIG on disaster management.
- A technical presentation at the round table discussion on the Adoption of Common Reference System for the ASEAN Region. The presentation delivered at this forum focused on hierarchical arrangement and initiatives associated with the international reference frame, regional reference frames, applications and services, and the involvement of our sister organisations International Association of Geodesy (IAG), and United Nations Global Geospatial Information Management – Asia Pacific (UN GGIM-AP) on such issues.

The Commission 5 “take home messages” from SEASC proceedings, and our involvement in various forums pertaining to this region were as follows –

- Geo -spatial data infrastructure (SDI) needs to be “fit for purpose” and “maintainable”.
- The importance of developing fundamental SDI framework components, such as institutional, legal, technical, data accessibility and timeliness, data quality and accuracy, are re-emerging as key drivers or justification for geospatial action.
- The increasing use of “cloud” technology for accessing data, integrating data, computations, crowd sourcing and engaging users / citizens of geo-spatial information.
- The need for smarter data collection / gathering / management techniques for the large quantities or “mass” amounts of data / information that is coming in the future.
- The need for up to date specifications, uniform practices and standards for new measurement techniques and mass data from sources such as laser scanners, digital cameras, LIDAR, INSAR, IFSAR, digital imagery etc.
- The ongoing need for building the capacity of not just young surveyors but also the mature or present surveyors.
- Education of geo-spatial data users.
- More promotion of FIG and sister organisation initiatives and our role / function so as to avoid duplication and the wasting of the precious industry “time and limited resources”. For example the better use of International GNSS Service (IGS) services and expertise, and the Asia Pacific Reference Frame (APREF) and its frameworks, services, and intellectual network.
- 70% of the world’s wealth is associated with land related activities and as FIG has an important role in this industry this needs to be emphasised at all levels of SDI organisations.

~~~~~

**The RFIP technical seminar** was an important event for not only FIG Commission 5 but also to IAG and UNGGIM – AP. The objectives were to –

- Facilitate a regional forum for geodetic agencies but focussed on the needs of Asia and the Pacific.
- Build the geodetic capability of the Asia Pacific through technical agency-to-agency exchange.
- Improved data sharing and international participation in the APREF initiative and IGS.



The RFIP event was organised with local surveying organisation PhilGEGS (Philippine Geodetic Engineering and Geomatics Society) and it was co-sponsored by the IAG, UN GGIM-AP and the UN-International Committee on GNSS (ICG), with generous corporate support provided by ESRI, Trimble and Leica Geosystems. There were over 40 participants who were primarily from the region and the Pacific islands. Four participants were provided financial assistance from the UN Office for Outer Space Affairs (UNOOSA). The technical seminar was also convened at the PICC.

The 2 day seminar consisted of 20 technical presentations and these speakers were from Australia, New Zealand, Japan, Korea, Philippines, Singapore, Indonesia, Fiji, PNG, and Sweden. The event secured the presentation services of experts such as Prof. Chris Rizos from the IAG, Dr. John Dawson from GeoScience Australia, and numerous geodetic specialists from the UN GGIM – AP working group such as Prof. Kwon Jay-hyoun and Mr Tetsuro Imakiire. The organisation and administration of the technical program was controlled by Commission 5, and presentations were specifically aimed at reference frame, geodetic and positioning issues and infrastructure. The general topics were –

- The Status and Issues of Geodetic Infrastructure from Countries in the Region
- IGS Services and Other Initiatives
- APREF Status and Determination
- Reference Frame Infrastructure
- Gravity and WHS
- Multi-GNSS Environment
- Going GeoCentric
- Dynamic Datums
- The Role of Manufacturers in Geodetic Infrastructure

For the more detailed information about the presentations navigate to our Commission 5 website - <http://www.fig.net/commission5/index.htm>.

From a FIG Commission 5 perspective this event was a success. It brought to the attention of various geospatial / geodetic agencies and users in the region the opportunities, benefits and efficiencies to be gained by utilising APREF and the services from IGS. Further discussions highlighted the way forward for APREF and revealed the primary issues that are hindering participation of countries, such as the lack of resources (funding), knowledge and experience, and prohibitive data exchange or sharing policies. The event also enabled participants to expand their professional network and to actively pursue operational assistance with their specific agency issues with experts or specialists in the related fields / disciplines.



The profile of FIG Commission 5 was also enhanced in this region. FIG's ability to connect with operational surveyors is a well-respected asset in this region, and this was clearly demonstrated by the elaborate ceremonial signing of the RFIP TS Manila agreement with the President of PhilGEGS – Avelino L San Buenaventura, and dignitaries. Many participants also commented on how valuable the information was to their agency and that they (including presenters) would like to participate in similar technical seminars in the future. From a PhilGEGS perspective this event was very important to their regional profile and the geodetic community as they are developing strategies and implementation plans to modernise their geodetic framework by adopting an ITRF based “geocentric datum”. In fact, an additional outcome from this event was a proposal from PhilGEGS to hold a 3 day workshop on this specific geodetic subject. This event is proposed for early June 2014 on the Philippine island of Boracay.

A technical manual on “Reference Frames in Practice”, that uses specific information from this event and the RFIP seminar held previously in Rome, is currently under preparation. It is anticipated that it will be ready for FIG publication and be officially released at our Congress next year in Kuala Lumpur. Achieving this will fulfil part of Commission 5's work plan commitments but it will also further consolidate joint IAG – FIG – UN GGIM AP activities and serve as foundations for the years to come.

Finally, FIG Commission 5 wishes to acknowledge local hosts Mr. Randolph Vicente, Ms. Charisma Victoria Cayapan, and other PhilGEGS representatives for their generous assistance and great hospitality.

## Reference Frame in Practice Photo Gallery







