

ICSM NEWS – June 2008

AuScope Geospatial Progressing

The implementation of the Geospatial component of AuScope is now building momentum. The development of the GNSS network has commenced – Western Australia now has two sites operational and another three under construction, Tasmania has two sites under construction and Victoria has its first site under construction. Elsewhere, site selection continues and building will commence very soon.



The Satellite Laser Ranging program has been completed with the successful laser power upgrade at Mt Stromlo and the completion of an observation campaign by the French Mobile Laser Ranging instrument at Burnie, Tasmania.

The Gravity program is now underway with the purchase of the FG5 Absolute gravimeter and the first of the gPhone Earth Tide meters. Testing of the instruments continues before the commencement of the first observational program.

The development of the VLBI array is the most technologically complex component of AuScope Geospatial. The three sites for the array have been selected at Hobart, Yarragadee and Katherine. The first 12m Patriot telescope has been ordered and will be delivered to Hobart early in the new calendar year. Three Hydrogen Maser atomic clocks have also been ordered and will be installed initially at Hobart for testing, before full installation at the Yarragadee and Katherine facilities. For more information see www.auscope.org.au

Land Administration Conference Celebrating 150 Years of the Torrens Titling System

A Land Administration Conference is to be held in Adelaide, South Australia on 28-31 October 2008. The conference will celebrate 150 years since the inception of the world-leading Torrens Titling System.



The Torrens Title System is named after Sir Robert Richard Torrens, who is credited with developing and implementing this unique and efficient system of land titling. It is based on the principle of a single indisputable Certificate of Title for each parcel of land.

The Torrens Title System was first established in South Australia in 1858. It has subsequently been used extensively throughout Australia and New Zealand; and its use has now spread throughout the world. In the 150 years since its inception, land titling processes and systems have been modernised, but the founding principle has remained unchanged.

The Conference will include plenary sessions, meetings of Australian and New Zealand Surveyors-General (ICSM), Registrars-General and Valuers-General; as well as an Industry Day.

On the social side, it shall commence with a Cocktail evening and also include a Gala Dinner.

'Changing the Guard'

Garry West, Northern Territory Surveyor-General, has stood down as ICSM Chairman and Russell Priebbenow, Queensland Director, Survey Policy and Infrastructure, has been unanimously elected as the ICSM Chairman for 2008-2010.



Garry West & Russell Priebbenow

ICSM Working Groups and disbanding of NTWG and AHS

ICSM has agreed to disband two temporary Working Groups, the Native Title and All-Hazards Symbology working groups. Both groups have successfully completed their Terms of Reference.

ICSM wishes to thank the members of both of these Working Group for their efforts and dedication to achieving results.

ICSM now has 11 active Working Groups:

- Australian Spatial Data Infrastructure (ASDI)
- Cadastral Reform (PCCR)
- Data Framework (DFTSC)
- ePlan Implementation of Cadastral Transfer Standard (ePlan)
- Geodesy (GTSC)
- Geographical Names in Australasia (CGNA)
- Imagery (IMAGERY-SIG)
- National Digital Elevation Model (ESIG)
- Roads (RWG)
- Tides and Mean Sea Level (PCTMSL)
- Topographic Information (PCTI)

Cadastral Workshop

In March 2008, ICSM held a two-day workshop to review the 'state-of-play' of the various cadastral systems in Australia and New Zealand. A consolidated summary of the similarities and differences as well as the strengths and weaknesses of each cadastral system was produced. From this an assessment is being made of the desired characteristics of a future best practice cadastral system, across jurisdictions—a unified cadastral vision. A plan of actions to achieve this desired future state is also being developed.

Fundamentals of Mapping (watch this space)

ICSM is working on a new web based package called *Fundamentals of Mapping*.

It is designed to provide a comprehensive, but uncomplicated, overview of maps and mapping.



Its primary design concept is that it has been written using plain English, avoiding the use of jargon. The package uses informative images and graphics to enhance learning and includes numerous hyperlinks to websites which offer greater details on specific subjects.

Topics include:

- History of Mapping
- Types of Maps:
General Reference, Thematic, Topographic, Cadastral, Navigation Charts and Series
- Maps as a Summary of the World
- Information about the Map (Marginalia)
- Cartographic Considerations
- Latitude and Longitude
- Projections
- Map Specification
- Reference

The Beta version is currently being developed on the ICSM website and will be to be sent live in mid-2008.

It is envisaged that this package will 'grow with time' with additional modules and content being sequentially added.

Topics under consideration include GIS and digital mapping, surveying, geodesy (datums) and, most importantly, a teachers package. When released to the Public the url of the site will be

<http://www.icsm.gov.au/mapping>



Tides Workshops

ICSMs Permanent Committee on Tides and Mean Sea Level is co-sponsoring of a tides workshop aimed at those people involved in tidal analysis and prediction.

The workshop will be held at the Bureau of Meteorology's National Tidal Centre (NTC), Adelaide on 18-21 August 2008. The workshop will be hosted by the NTC, the Australian Hydrographic Office and Flinders Ports. Topics to be covered will include:

- tidal theory
- storm surges and extreme events
- instrumentation
- real-time systems with meteorological sensors
- benchmark levelling and datums
- data analysis and quality control
- archiving and quality assurance

During the workshop there will be hands-on, practical sessions as well as formal presentations on analysis and quality control of sea level data. For more information please contact Bill Mitchell, Manager, NTC:

Telephone (08) 8366 2710;

Email: B.Mitchell@bom.gov.au.

As part of the process of growing the understanding of the tidal realm; the NTC sponsored a number of Indian Ocean Tsunami Warning System fellowships. During their 4-week stay at the NTC in May 2008, the students from India, Malaysia and Singapore received a combination of formal and hands-on training relating to tides and sea level monitoring.

Allan Suskin of NTC shows a model tide gauge to



- G. Varuna Kumar of the Survey of India;
- Zaridah Jalal of the Malaysian Meteorological Department; and
- Lee Weng Choy of the Maritime & Port Authority of Singapore

Harmonised Data Model

ICSM has been working on developing of Version 2 of its Harmonised Data Model (HDM). The original Model was released in 2000. Since then, technology and the spatial industry have progressed and the need for a revised harmonisation vision has grown.

In early-2008 ICSM released its new conceptual model of the HDM. This can be accessed from the ICSM website www.icsm.gov.au:

The model is housed on the CSIRO Solid Earth and Environmental Grid (SEEGrid) site. This provides a stable and accessible environment which is co-located with other similar initiatives that are developing various data models.

Next ICSM Meeting

ICSM's next meeting is scheduled for 29 & 30 October, 2008, in Adelaide, South Australia. This shall coincide with The Sesquicentennial of Torrens Title Land Administration Conference 2008.