



# TECHNICAL SEMINAR

## VERTICAL REFERENCE FRAMES

### 27-28 July 2015, Singapore

**Event Organisers - IAG, (International Association of Geodesy), FIG (Fédération Internationale des Géomètres), UN Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP), ICG (International Committee on GNSS) and Singapore Land Authority**

**When** – 27-28 July 2015 before and in parallel to the SEASC 2015 in Singapore.

**Where** – Marina Bay Sands, Singapore.

**Who should attend** – This seminar will be of benefit to operational geodesists or surveyors who are dealing with vertical reference frame issues, either in a government or commercial environment. It is also open to academics or postgraduate students in a surveying or related discipline.

**Presenters** – Several distinguished geodesists from different organisations and disciplines will be presenting at the seminar, including *Chris Rizos, Dave Dodd, John Dawson, Graeme Blick, etc.*

#### **Preliminary Seminar Program**

##### **27 Monday July 2015**

- Definitions and Terminology
- Physical and Geometric Height Systems
- Classical and Modern Vertical Datums
- Kinematic Datums
- Conversions and Transformations

##### **28 Tuesday July 2015**

- Time-dependent Heights
- Classical Heighting
- GNSS Heighting
- Hydrographic Height Determination
- Case Studies e.g. New Zealand, Australia, Singapore

**Cost** - The fee will be kept to a minimum, and will include seminar material, morning and afternoon teas, lunches and seminar dinner. The expected seminar fee is €120 per person.

**Registration and Payment** – Unfortunately the number of participants will be restricted to 50. Early registration is therefore highly recommended. Your registration of interest will need to provide your name, title, occupation, organisation that you will be representing, and full contact details (email address, postal address and telephone numbers). Also, please provide a brief note on your reasons for wanting to attend this seminar. Your registration of interest will need to be emailed to Volker Schwieger ([volker.schwieger@ingeo.uni-stuttgart.de](mailto:volker.schwieger@ingeo.uni-stuttgart.de)) and Li Zhang ([li.zhang@ingeo.uni-stuttgart.de](mailto:li.zhang@ingeo.uni-stuttgart.de)) as soon as possible, but not later than **10 May 2015**.

Please note, if the registration of interest exceeds the limit then the organisers reserve the right to adjudicate on who can participate.

International Committee on GNSS (**ICG**) is kindly providing financial assistance for eligible participants, with preference given to participants from developing countries. Financial assistance will only cover travel costs, and will NOT include costs such as accommodation, travelling allowance for food / beverages, etc. The organisers will decide on who will be sponsored. When registering your interest to participate, please provide a business case as to why you should be given ICG financial assistance as well as an estimate of the amount of assistance you are seeking.

### **More Information**

- For general seminar enquiries as well as registration and seminar program enquiries – Volker Schwieger ([volker.schwieger@ingeo.uni-stuttgart.de](mailto:volker.schwieger@ingeo.uni-stuttgart.de)) and Li Zhang ([li.zhang@ingeo.uni-stuttgart.de](mailto:li.zhang@ingeo.uni-stuttgart.de)).
- Participants will be expected to organise and book their own travel and accommodation. For accommodation options please refer to the SEASC 2015 website - <http://www.seasc2015.org.sg/>.
- For other travel information please refer to the SEASC 2015 website for further information - <http://www.seasc2015.org.sg/>.