



## **International Association of Geodesy (IAG) Annual Report 2014**

*<http://www.iag-aig.org>*

### **INTRODUCTION**

Geodesy is the discipline of the measurement and representation of the Earth's geometry, gravity field and orientation including their temporal variations, i.e. crustal deformation, mass displacements and rotation. The mission of the IAG is the advancement of geodesy by furthering geodetic theory through research and teaching, collecting, analysing, modelling and interpreting observational data, stimulating technological development, and providing a consistent representation of the Earth's time-dependent figure, rotation, and gravity field.

The structure of IAG includes four Commissions, the Inter-Commission Committee on Theory (ICCT), fourteen International Scientific Services, the Global Geodetic Observing System (GGOS), and the Communication and Outreach Branch (COB). The Commissions are divided into Sub-commissions, Projects, Study Groups and Working Groups. The ICCT investigates geodetic science problems in close cooperation with the Commissions. The Services generate scientific products by means of Operations, Data and Analysis Centres. One of the roles of GGOS is the coordination of the work of the different IAG components, relating in particular to the maintenance of the global reference frame for measuring and consistently interpreting key global change processes, and to promote its use to the scientific community, policy makers and the public. The COB provides communication, public information and outreach links, in particular via the IAG Website and the monthly Newsletters.

IAG's administration is supervised by the Council and delegated to the Executive Committee, the Bureau and the Office. The membership of the Council consists of delegates appointed by the adhering bodies; the Bureau comprises the IAG President, Vice-President and Secretary General; and the Executive Committee consists of the Bureau and other members elected by the Council; the Office assists the Secretary General. The detailed programme of the IAG is published in the quadrennial Geodesist's Handbook, and reports are published in the bi-annual IAG Reports (Travaux de l'AIG).

### **ADMINISTRATION**

#### **IAG Council**

The IAG Council meets regularly at the IUGG General Assemblies. In between it is informed by the Secretary General on current activities. Main topics in 2014 were related to the periodic (every eight years) review of the Statutes and Bylaws, and the preparation of the IUGG General Assembly 2015.

#### **IAG Executive Committee (EC)**

The IAG EC met twice in 2014, namely in Vienna, Austria, April 26, and in San Francisco, CA/USA, December 15. Important topics were the restructuring of the GGOS and the assessment of the IAG Services (see below). All IAG components (Commissions, ICCT, Services, GGOS, COB) presented their activity reports, the members at large reported on the developing countries, and the editors of the

Journal of Geodesy and the IAG Series (published by Springer) gave overviews on the status of recent publications. The meeting summaries are regularly published in the IAG Website ([www.iag-aig.org](http://www.iag-aig.org)).

## **IAG Bureau**

The IAG Bureau held monthly teleconferences to facilitate day-to-day decisions. The IAG President, the Vice-President and the Secretary represented IAG in various scientific meetings (see below).

## **IAG Office**

Main activities of the IAG Office were the organisation of the EC meetings including the formulation of detailed minutes for the EC and summaries for the IAG homepage and the Journal of Geodesy, the preparation of the IAG Symposia at the IUGG General Assembly 2015, and the financial affairs.

## **ACTIVITIES**

### **Commissions, Inter-Commission Committee, and Services**

The four IAG Commissions (Reference Frames, Gravity Field, Earth Rotation and Geodynamics, Positioning and Applications), the Inter-Commission Committee on Theory (ICCT), and the fourteen Services maintain their individual Webpages (all accessible via the IAG Homepage). Several Services and sub-components (Sub-Commissions, Working and Study Groups) held their administrative meetings (Coordinating, Directing or Governing Board), and symposia and workshops (see below).

### **Global Geodetic Observing System (GGOS)**

GGOS realised its restructuring, in particular the integration of the Working Groups in the two Bureaus (Networks and Observations, Products and Standards). The GGOS Strategic Plan was revised and an inventory of standards and conventions was drafted. The GGOS Coordinating Board met twice (April and December) and the GGOS Consortium met once (December). The outreach is done via the GGOS Portal and webpages ([www.ggos.org](http://www.ggos.org)). GGOS represents the IAG in the Group on Earth Observation (GEO) and in the United Nations Global Geospatial Information Management (GGIM).

### **Communication and Outreach Branch (COB)**

The publication of the monthly Newsletters (online and in the Journal of Geodesy), and the maintenance of the IAG Homepage were the main activities of the COB. The IAG Newsletter is sent to the IAG members, to the Presidents and Secretaries General of the IUGG Associations, and to the members of the Joint Board of Geospatial Information Societies (JBGIS).

### **Important Meetings of IAG Components and IAG Sponsored Meetings in 2014**

- European VLBI Network Technical and Operations Group (EVN TOG) Meeting, Bad Koetzting, Germany, 23-24 January 2014;
- International VLBI Service for Geodesy and Astrometry (IVS) General Meeting, Shanghai, China, 02-07 March 2014;
- European Reference System (EUREF) Symposium, Vilnius, Lithuania, June 04-06, 2014;
- International GNSS Service (IGS) Workshop "Celebrating 20 Years of Service", Pasadena, CA, USA, 23-27 June 2014;
- 3rd International Gravity Field Service (IGFS) General Assembly, Shanghai, China, 30 June - 06 July 2014;
- International Symposium on Geodesy for Earthquake and Natural Hazards (GENAH 2014), Matsushima, Miyagi, Japan, 22-27 July 2014;

- 18th WEGENER General Assembly: Measuring and Modelling our Dynamic Planet Leeds, UK, 01-04 September 2014;
- Journées 2014 "Systemes de reference spatio-temporels", Pulkovo Observatory, St. Petersburg, Russia, 22-24 September 2014;
- 12th European VLBI Network (EVN) Symposium, Cagliari, Italy, 07-10 October 2014;
- Reference Frames for Applications in Geosciences (REFAG2014), Luxembourg, Luxembourg, 13-17 October 2014;
- International DORIS Service (IDS) Workshop, Konstanz, Germany, 27-28 October 2014;
- International Laser Ranging Service (ILRS) Technical Workshop, 27-31 October 2014, Greenbelt, MD, USA;
- Third International VLBI Technology Workshop, Groningen/Dwingeloo, The Netherlands, 10-13 November 2014;
- PECORA 19 Fall Meeting (ASPRS, IAG, ISPRS) "Sustaining Land Imaging: Unmanned Aircraft Systems (UAS) to Satellites", Denver, Colorado, USA, 17-20 November 2014;
- Geocentric Reference System for the Americas (SIRGAS) Symposium 2014, La Paz, Bolivia, 24-26 November 2014;
- 11th International Symposium on Location-Based Services, Vienna, Austria, 26-28 November 2014.

### **Schools organised by the IAG**

- School on Vertical Reference Systems (Escuela SIRGAS en sistemas verticales de referencia), La Paz, Bolivia, 20-22 November 2014.

### **Cooperation with other Organisations**

The IAG maintains close cooperation with several organisations outside IUGG: Advisory Board on the Law of the Sea (ABLOS with IAG presidency), Group on Earth Observation (GEO), International Standards Organisation (ISO, TC211 Geographic Information / Geomatics), Joint Board of Geospatial Information Societies (JBGIS), United Nations Offices for Outer Space Affairs (UNOOSA, with Space-based Information for Disaster Management and Emergency Response, UN-SPIDER, and International Committee on Global Navigation Satellite Systems, ICG), and the United Nations Global Geospatial Information Management (UN-GGIM).

### **Publications**

The monthly issues of the Journal of Geodesy and the proceedings of the IAG Symposia at the IUGG General Assembly 2011 (IAG Symposia Series, Vol. 139) and the Workshop on the Quality of Geodetic Observation and Monitoring Systems (Vol. 140, on-line) were the main publications in 2014.

### **Awards, Anniversaries, Obituaries**

14 travel awards were granted to young scientists for participation in 6 symposia. The individual IAG membership (ca. 200 members) was regularly updated. An obituary was written for the former IAG Secretary General Christian Tscherning.

### **PLANNED FUTURE ACTIVITIES**

The main activities in the future will concentrate on the assessment and eventual restructuring of the IAG Services and the full implementation of all GGOS components.

Submitted by  
Hermann Drewes, IAG Secretary General



Participants of the WEGENER Symposium, Leeds, UK, 01-04 September 2014



Participants of the SIRGAS School on Vertical Reference Systems, La Paz, Bolivia, 20-22 November 2014