Summary of the Seventh Meeting of the IAG EC 2007-2011

Place: Hotel Westin San Francisco, 50 3rd St., San Francisco, California 94103

Time: Sunday, December 12, 2010, 09:00 – 17:00

Attendees (voting): M. Sideris (IAG President), Ch. Rizos (IAG Vice-President), H. Drewes (IAG Secretary General), G. Beutler (IAG Immediate Past President), Z. Altamimi (President Commission 1), Y. Fukuda (President Commission 2), R. Gross (Vice-President Commission 3), M. Santos (stand-in for S. Verhagen, President Commission 4), M. Rothacher (Chair of GGOS), St. Kenyon, R. Neilan, H. Schuh (Representatives of the Services), K. Heki, R. Wonnacott (Members at Large);

Attendee (non-voting): H. Hornik (IAG Assistant Secretary);

Regrets: S. Verhagen (President Commission 4), J. Ádám (President of COB), N. Sneeuw (President ICC on Theory), R. Klees (Editor in Chief Journal of Geodesy).

Summary of Agenda Items:

1. Welcome and adoption of agenda

M. Sideris welcomed the members of the IAG Executive Committee (14 out of 15 voting members, 1 non-voting member). The agenda had been distributed previously by e-mail and posted in the IAG Office Homepage. It was unanimously adopted. The minutes of the 6th EC Meeting had been distributed before by the Secretary General.

2. Reports of the Commissions

Z. Altamimi presented the report of Commission 1. The IAG School on Reference Frames, organized by ICCT and Commission 1, took place from June 07 to 12, 2010 in the Aegean University, Mytilene, Lesvos, Greece (see http://www.topo.auth.gr/IAG2010 RefSchool/) with about 60 participants. Z. Altamimi recommended such activities also for other Commissions. The Symposium "Reference Frames for Applications in Geosciences (REFAG2010)", October 04-08. 2010 was held at ENSG, Marne la Vallée. (http://iag.ign.fr/index.php?id=160) with about 150 participants. The proceedings will be published in the Springer IAG Symposia Series. Z. Altamimi addressed then the relationship between IAG and COSPAR. IAG Commission 1 is identical to COSPAR Sub-Commission B2 under the old name "International Coordination of Space Techniques for Geodesy and Geodynamics (CSTG)". In addition, there is the Panel on Satellite Dynamics (PSD) in COSPAR. CSTG and PSD organized joint Symposia at the biannual COSPAR Scientific Assemblies (SA) in the past. At the 2008 SA in Montreal there were only four papers on reference frames and a limited number of participants. Due to time conflicts with the REFAG Symposium there was no participation of Sub-commission B2 in the PSD Symposium at the COSPAR 2010 SA in Bremen. Z. Altamimi suggested that a possible merge of CSTG and PSD should be discussed.

In the discussion, *H. Drewes* mentioned the *School on Reference Systems* of Sub-commission 1.3b SIRGAS held in Lima, Peru, November 8-10, 2010 as a joint activity of IAG and the Pan American Institute of Geography and History (PAIGH) with 120 participants. With respect to the relationship between IAG and COSPAR, *G. Beutler* and *H. Drewes* emphasized the traditional close relations with COSPAR as an important Committee of ICSU. The proposal of merging Sub-Commission B2 and PSD should be discussed in detail during the IUGG General Assembly 2011 in Melbourne.

In the report of Commission 2, *Y. Fukuda* mentioned three meetings held in Saint Petersburg, Russia, namely the 2nd IAG International Symposium "TGSMM-2010" (June 22-25, 2010), the 4th Joint Meeting of the CCM Working Group on Gravimetry, and IAG SG 2.1 on Comparisons of Absolute Gravimeters (June 21, 2010), and the X-th International Geoid School (June 28 – July 02, 2010). Commission 2 also participated in the 2nd International Symposium of the International Gravity Field Service (IGFS) "Study of the Earth's gravity field, with a special emphasis on gravity change and the gravity field of the Arctic", Fairbanks, Alaska, September 20-22, 2010. S. Kenyon recommended organizing the symposia in a four years cycle. Y. Fukuda presented then some details on the activities of IC-WG2.1 (Absolute Gravimetry) and SC-2.3 (Dedicated Satellite Gravity Mapping Missions).

R. Gross concentrated his report of Commission 3 on the scientific meetings organized during the present legislature period since September 2007. Recent Symposia were the 15th WEGENER General Assembly, Istanbul, Turkey, October 14-17, 2010 (presentations online at http://www.koeri.boun.edu.tr/jeodezi/wegener2010/), the GGOS Science Workshop on Observing and Understanding Earth Rotation, Shanghai, China, October 25-28, 2010, (presentations online at http://202.127.24.12/dct/Wiki.jsp?page=Presentations) and the participation in the Journées Systèmes de Référence Spatio-Temporels, Paris, France, September 20-22, 2010 (Proceedings in preparation).

The activities of Commission 4 were presented by *M. Santos* by proxy of *S. Verhagen*. He explained the participation in / contributions to meetings which have partly been sponsored or co-sponsored by the Commission. Furthermore, the working plans for 2011 were listed, in particular the joint IAG/IAMAS Symposium J-G01 "Space geodesy-based atmospheric remote sensing as a synergistic link between Geodesy and Meteorology" during the IUGG General Assembly 2011 in Melbourne. *M. Santos* emphasized the efficient and intensive co-operation of the Commission with the FIG on all fields of activities. Concerning the various events *M. Sideris* discussed how to distinguish meetings organized by a Commission and those sponsored by IAG. He underlined the importance of mentioning IAG at all lecels each time a meeting is sponsored by IAG.

3. Report of the Inter-Commission Committee on Theory (ICCT)

No representative of ICCT was present at the EC Meeting, and no report was submitted. The discussion concentrated on the future of the ICCT. *H. Drewes* explained that according to the IAG Bylaws (§ 17.d), *Inter-Commission Committees will be established for at least 2 periods (eight years) and shall be reviewed by the Executive Committee every eight years*. The ICCT has been established in 2003. Thus, the ICCT has to be reviewed in 2011. The results shall be discussed at the IUGG 2011 General Assembly, and then it has to be decided whether or not to continue ICCT for another eight years period. It was concluded to ask the ICCT to submit a detailed report on its activities (deadline end of April 2011) and then to discuss this item again. *Z. Altamimi, Y. Fukuda, R. Gross, S. Verhagen, H. Schuh* and *M. Sideris* were appointed as members of the Review Committee.

4. Report of the Communication and Outreach Branch (COB)

As J. Ádám could not participate in the EC Meeting, he sent a COB summary report which was presented by H. Drewes. The IAG Newsletter is now distributed monthly by e-mail in the traditional extended form also to other Associations and Societies, and published in the JoG in an abbreviated version. The COB urges all colleagues to submit information, in particular

on upcoming meetings, in order to enable the COB to gather all news to be published in the Newsletter. The IAG Homepage is continuously maintained, and e-mail correspondence is extended as an outreach activity. *J. Ádám* informed the EC that IUGG President T. Beer asked him to act as a member of the IUGG Resolutions Committee during the IUGG General Assembly in Melbourne.

5. Report of the Global Geodetic Observing System (GGOS)

A detailed report on GGOS was given by *M. Rothacher*. He started with the status of the GGOS Working Groups and outreach activities (Portal, Webpages, Brochure, Exhibit Booth). A letter to ICSU has been drafted to recognize GGOS as the 4th Global Observing System, and a book on *Understanding Sea-level Rise and Variability* was published. He then reported on the GGOS Inter-Agency Committee (GIAC). The goal is to foster the long-term support and sustainability of the IAG Services and the global GGOS infrastructure. Since GIAC was established, 16 governmental institutions have signed the *Frankfurt Declaration*. A first planning meeting took place recently; and a draft of the Terms of Reference was formulated. The next steps are the elections of the GIAC chair, vice chair and secretariat; the elections are planned for the EGU Meeting 2011. Special attention shall be given to engage additional institutions to become members of GIAC.

During the GGOS Retreat in Miami, February 2010, three integrated themes have been selected for GGOS, namely Theme 1: Global Unified Height System, Theme 2: Geohazards, and Theme 3 Sea-Level Change, Variability and Forecasting. Topics for the long term GGOS action plans are a global GGOS core network and ground-based infrastructure, satellite missions and space infrastructure, data handling and management, including the GGOS Portal, GGOS outreach, data analysis and combination, and Earth System models and interpretation. *M. Rothacher* described then the action plan for the period 2011-2015.

GGOS representatives participated in the GEO Plenary and Ministerial Summit in Beijing, November 3-5, 2010 and presented IAG and GGOS with an exhibition booth and a declaration. The GEO Work Plan has to be developed in 2011 including three key objectives: The implementation of GEOSS, the development of information products and services, and the reinforcement of coordination and resource mobilization. *M. Rothacher* concluded with a review on the past and future meetings and workshops.

6. Report of the Services

S. Kenyon reported on the gravity orientated IAG Services. The Global Geodynamics Project (GGP) is eager to get the status of an IAG Service. H. Schuh added that within the GGP about 24 globally distributed absolute gravimeters are participating very actively and are providing interesting results, thus these plans should be supported. M. Sideris suggested that the GGP should submit a proposal describing in detail its products and plans and then the IAG could decide whether establishing a new Service would be warranted or not.

R. Neilan reported on the activities of the IGS. In particular the IGS Workshop and Vertical Rates Symposium in Newcastle upon Tyne, England, June 28 – July 02, 2010, and the Fifth Meeting of International Committee on Global Navigation Satellite Systems (ICG), in Turin, Italy, October 18-22, 2010 were highlighted. R. Neilan emphasized the importance of future recognition of the IAG Services and especially GGOS by the UN and ICSU. She informed the EC that FAGS and WDC have been dissolved and the World Data System has been created. The rules for the official approval of services as WDS members are not yet finished.

The report on the geometry oriented Services IVS and ILRS was presented by *H. Schuh*. The new generation of VLBI2010 antennae is recording continuously on a 1 mm accuracy level for the determination of position and EOP. At present, 7 antennae fulfilling these conditions are working worldwide; several others are under construction or planned. Unfortunately the circumpolar area within 15° distance in latitude and the entire southern hemisphere are only poorly covered. Concerning the ILRS, several new satellite missions (QZS-1, TanDEM-X, GLONASS-109, -110, -118, -120, CryoSat-2, PROBA-2) have been launched. Various core stations have been re-constructed or repaired; fortunately also Concepcion in Chile has resumed its operation after the severe earthquake of February 27, 2010. There are now 9 ILRS Analysis Centers. ILRS Meetings have been held on the occasion of the EGU Assembly, May 8, 2010, and REFAG Symposium, October 1, 2010.

7. Report of the JoG Editor in Chief

H. Drewes presented a report of R. Klees on this topic. In the last years extended JoG volumes could be issued; the number of submissions is quite high (> 150). Some special issues are currently under review ('Ionosphere', 'IVS – CONT08', 'GOCE'), and another one (ILRS) is planned. The turnaround times for acceptance to online, review and Springer/EB could be reduced considerably. Fortunately, the ISI impact factor has increased to 2.429. H. Drewes mentioned that IAG confers every two years the Young Authors Award. The rules are given in the IAG Bylaws. As the next Award has to be granted in Melbourne 2011, the process of proposals, selection and voting has to be done by e-mail before the IUGG Assembly. The Editorial Board (EB) is looking for young colleagues willing to act as new reviewers. The EC members are asked to submit proposals to the Secretary General to set up a list for the EB.

8. Report on developing countries

R. Wonnacott reported on the recent activities especially concerning geodesy in Africa. Various (interdisciplinary) meetings have been held. Activities to install permanent base stations or move towards the ITRF are underway in about 20 African countries; some sites have been installed or are going to become operable soon. On the question of *H. Drewes* whether the data are freely available, *R. Wonnacott* replied that the situation is still complicated, however an improvement can be expected in small steps.

9. Report on the Joint Board of Geospatial Information Societies (JBGIS)

C. Rizos gave some summarizing information on the JBGIS. The members are IAG, ICA, GRSS, FIG, IHB, IGU, IMTA, ISCGM, ISPRS, and GSDI. There were meetings on the occasions of the FIG Congress in Sydney, April 2010, and the ISPRS Centenary in Vienna, July 2010. The JBGIS Working Group on Risk and Data Management, issued a booklet with contributions from all members (http://www.fig.net/jbgis/publications/jbgis_booklet_2010.pdf).

10. Report on the Advisory Board on the Law of the Sea (ABLOS)

C. Rizos reported on the 6th ABLOS Conference "Contentious Issues in UNCLOS – Surely Not?" held in Monaco, October 25-27, 2010. The purpose was to bring together specialists from various disciplines for a discussion of the challenges that arise when applying science and technology with due consideration of the juridical requirements of the UN Convention on the Law of the Sea (UNCLOS). 90 delegates from 28 countries participated and 28 papers were presented in 9 sessions. The 7th ABLOS Conference will be held in Monaco, Oct. 2012.

11. IAG Report 2007-2011 (Travaux de l'AIG)

H. Drewes pointed out that the IAG Midterm Reports serve as a tool to monitor the progress of work done by the components of the IAG, and that the Quadrennial Reports for the General Assemblies serve as a description of all the IAG activities and thus represent a documentation of the history of IAG. The deadline for submission of the texts is March 31, 2011.

12. Status of the Proceedings of the IAG Scientific Assembly 2009

S. Kenyon reported that the review has been finalized in August; the volume will comprise about 600 pages. Colour pages are accepted for extra price. The editors are in close contact with Springer. The editors of the Proceedings are obliged to buy a certain number of copies (150 or 300 respectively); these shall be distributed to the Symposia participants. Recent volumes are also published online and may be downloaded.

13. Status IUGG General Assembly Melbourne 2011

H. Drewes presented a list of the planned 9 Union Lectures (each one organized by IUGG and each of the 8 Associations; IAG lecturer: *M. Rothacher*), 12 Union Symposia, 6 Joint Symposia led by IAG, 7 Joint Symposia co-sponsored by IAG and 7 IAG Symposia, as well as the key dates for deadlines. *H. Drewes* asked the EC to advertise the General Assembly in their surroundings and to encourage colleagues to register as IAG participants. About 4000 participants are expected. The general dates were then agreed by the EC:

- IAG Opening Session: Wednesday, June 29, morning;

- Scientific IAG Symposia: Wednesday, June 29 – Wednesday, July 6;

- IAG Closing Session: Wednesday, July 6, afternoon;

Council meetings: Tuesday, June 28 and Wednesday, July 6, morning;
 Old EC meetings: Monday, June 27, Sunday, July 3, Tuesday July 5;

New EC meeting: Thursday, July 7, morning;
IAG Reception: Wednesday, June 29, night;
IAG Dinner: Sunday, July 3, night;

- Business meetings: 5 evenings (Commissions, SG, WG, Projects).

According to the IAG Rules, a Guy Bomford Prize and a Levallois Medal may be awarded on the occasion of the General Assembly. Candidates for the Bomford Prize are nominated by the National Committees and selected by a Committee consisting of the IAG Commission Presidents and two other members. *H. Schuh* and *M. Sideris* were appointed as members in addition to the Commission Presidents *Z. Altamimi, Y. Fukuda, R. Gross, and S. Verhagen.* Candidates for the Levallois Medal are nominated by an ad hoc committee consisting of the IAG Honorary Presidents. IAG Fellows have to be nominated by the EC.

In the IAG Statutes (§16) it is stated that the Statutes and Bylaws shall be reviewed every eight years. A Review Committee will be appointed by the new EC at its first meeting. This committee is traditionally chaired by the immediate Past President.

14. Nomination Committee for IAG Officers 2011-2015

G. Beutler explained the procedure of nomination according to the IAG Bylaws. The Nomination Committee comprises G. Beutler (chairman), W. Featherstone, C.K. Shum and R.

Wonnacott. Nominations for the 2011 elections are required for the positions of President, Vice-President, Secretary General, Presidents of Commissions (4), Service representatives (3), members at large (2), and the President of the Communication and Outreach Branch (1). President, Vice-President and Presidents of Commissions may not be re-elected; the other officers are eligible for re-election. The list will be sent out on January 14, 2011 to the IAG Delegates. The IAG Delegates may then submit additional nominations. The actual election process, with the finalized list of candidates, can then be initiated by sending the list of candidates to the IAG Delegates in the second half of February 2011.

15. Nomination and appointment of the GGOS Chair

The GGOS Chairperson is appointed by the IAG EC in consultation with the GGOS Steering Committee. The appointment is for four years and may be renewed once. The present Chairman, *M. Rothacher*, was appointed in 2005 and re-appointed in 2007. So, a new Chairperson has to be elected. The EC asked *M. Rothacher* to submit nominations to the EC.

16. Sponsorship of symposia and workshops

H. Drewes mentioned two Symposia organized by IAG components:

- 1st International Workshop "The Quality of Geodetic Observation and Monitoring Systems";
- 17th International Workshop on Laser Ranging and 23rd General Assembly of the ILRS. Details and a complete list of IAG related meetings may be seen at http://iag.dgfi.badw.de/.

17. Next IAG EC Meeting

The EC decided that the next EC meeting will be held in Melbourne, Monday, June 27, 2011.

18. Adjourn

M. Sideris thanked the participants for their contributions and closed the session at 17:00.

Respectfully submitted Hermann Drewes, Secretary General Helmut Hornik, Assistant Secretary