

## Summary of the Second Meeting of the IAG Executive Committee 2007 – 2011

**Place:** Hotel Westin, 50 Third Street, San Francisco, California 94103, USA

**Time:** Saturday, 8 December 2007, 10:00 - 18:15

**Attendees (voting):** Michael Sideris (President), Hermann Drewes (Secretary General), Gerhard Beutler (Immediate Past President), Zuheir Altamimi (President Commission 1), Pieter Visser (standing in for Yoichi Fukuda, President Commission 2), Michael Bevis (President Commission 3), Markus Rothacher (Chair of GGOS), Steve Kenyon, Ruth Neilan, Harald Schuh (Representatives of Services)

**Attendees (non-voting):** Ivan I. Mueller (Past President), Helmut Hornik (Assistant Secretary General)

- Agenda:**
1. Welcome and adoption of agenda (MS)
  2. Adoption of minutes of the first EC Meeting, Perugia, July 10, 2007 (MS)
  3. Final structure of Commissions (ZA, YF, MB, SV)
  4. Final structure of Services (SK, RN, HS)
  5. Status of new Services IAS and IDEMS (HD)
  6. Final structure of GGOS (MR)
  7. Final structure of Inter-Commission Committee on Theory (NS)
  8. Report of Communication and Outreach Branch (JA)
  9. Representation of developing countries (KH, RW)
  10. Relations to other scientific bodies (ICSU, FIG, JBGIS, ...) (MS, CR, HD)
  11. Representatives to Services and external bodies (HD)
  12. Status of Geodesist's Handbook 2007/2008 (JA, HD)
  13. Status of Perugia proceedings (MS, CR, GB, HD)
  14. Programme structure IAG Scientific Assembly, Buenos Aires, 2009-08-31 to 2009-09-04
  15. New IAG fellows
  16. ICSU Grants programme for 2008
  17. Next IAG EC meeting
  18. Any other business
  19. Adjourn

### 1. Welcome and adoption of agenda

*M. Sideris* welcomed the members of the IAG Executive Committee (10 out of 15 voting members and 2 non-voting members). He thanked especially *R. Neilan* for the organization of the meeting. The attendees introduced themselves. The draft agenda was previously distributed by e-mail. *M. Sideris* proposed to include two items in the agenda topic 18 (IUGG EC meeting, support of symposia). The proposal was adopted.

### 2. Adoption of minutes of the first EC Meeting, Perugia, July 10, 2007

A draft of the minutes had been distributed by e-mail. *M. Sideris* added some minor corrections. They were unanimously accepted. *H. Drewes* as the IAG Secretary General explained that the adopted minutes are published in the official IAG homepage <<http://www.iag-aig.org>> and in the IAG Newsletter in a summarized version without details. The draft as well as the final full versions with all discussions is put on the EC page of the internal IAG Office website <<http://iag.dgfi.badw.de/ec>>. It was proposed to protect this section by a password.

### 3. Final structure of Commissions

The bases of all discussions on topic 3 were the written reports available in the IAG Office homepage well before the meeting. The final reports will be published in the 2008 Geodesist's Handbook.

*Z. Altamimi* explained the structure of **Commission 1 – Reference Frames**. The objectives as well as the structure are more or less the same as in the past four years. *H. Drewes* asked whether IC-WG1.4 (Site Survey and Co-locations, joint with IERS, chaired by *G. Johnston*, Australia) should be in the Commission in addition to the IERS. *M. Rothacher* explained that this WG is dealing with the development of new techniques and bringing them forward to be applied. *M. Sideris* asked about the previous Project on Satellite Altimetry. He said that altimetry is at present not sufficiently covered by the commissions. *H. Drewes* answered that the International Altimeter Service (IAS) is being planned. There was an agreement that Satellite Altimetry should be included in the structure of Commission 2 with links to IGFS.

Concerning the number of IC-P1.2 (Vertical Reference Frames), *H. Drewes* explained the **numbering of Projects, Working Groups and Study Groups**. According to IAG Bylaw 12, WGs and SGs are established for one period or less, i.e., a maximum of four years. Projects may be extended to two periods. Before the re-organisation of IAG in 2003, Study Groups were numbered continuously. Numbers given once were not used again. Thereby the numbers were ever increasing and earlier groups could always be assigned unambiguously, all reports of the groups can clearly be cited. Doubling of the numbers would cause confusion. Therefore this project should be continued with number IC-P1.2. IC-P1.1 shall not be used because this number was occupied in the period 2003-2007 and then resolved. *M. Sideris* moved to adopt this general rule. It was accepted.

In this context *H. Drewes* explained that the **structures and duties** of all IAG components and sub-components are clearly defined in the IAG Bylaws. Changes of these definitions are possible in principle, but have to be adopted by the IAG Council. Commissions are IAG components and have a steering committee. They shall be open to all IAG members and therefore not list specific membership. Sub-commissions are long term sub-components established for several periods. They subdivide the commissions. Therefore they should have neither specific membership nor a steering committee. Projects are sub-components established to develop new methods or techniques. They last one period but may be extended to another period after a positive review. Study Groups and Working Groups are limited to a four-years-period.

The new structure of **Commission 2 – Gravity Field** was presented by *P. Visser*. *H. Drewes* mentioned that the former Commission Project CP2.2 – North American Geoid was dissolved. The EC suggested that it should be re-established right away given the recent interest by the Canadian and US geodetic agencies to establish a geoid-based vertical datum. In contrary to the other continents, South America has two CPs, i.e. one for the Geoid (CP2.4) and another one for Gravity in South America (CP2.6). The representatives in both CPs are mostly members of administrations and less scientifically oriented, some of them have already retired from their former posts. *H. Drewes* moved to merge both CPs and, as far as possible, to nominate competent scientists for the work. *P. Visser* will discuss this item with the Commission President *Y. Fukuda*. *H. Schuh* asked whether, besides the no longer existing CP2.2 for North America, all continents would be treated by Commission 2. *H. Drewes* moved to re-name CP2.5 – South Asia Geoid into “Asia-Australia” or even better “Asia-Pacific”. *M. Sideris* repeated (see above, Commission 1) his proposal to install a Sub-commission on Altimetry, which together with the IGFS, will also be asked to see that the IAS gets established soon.

*M. Bevis* presented the structure of **Commission 3 – Earth Rotation and Geodynamics**. Sub-commission SC 3.1 – Earth Tides was extended to “Earth Rotation and Earth Tides”, and a new SC 3.4 (Cryospheric Change and Earth Deformation) was established. The question whether a new WG on South America can be established was answered by *H. Drewes* saying that any Commission is free to install such groups as long as the Bylaws are observed. He then asked whether the former Inter-commission Project on WEGENER shall be continued. *M. Bevis* will look after this issue. *M. Sideris* asked for a Sub-commission or a Project on InSAR. It should be established together with Commission 4.

The last report in this series was given by *R. Neilan* on behalf of *S. Verhagen* for **Commission 4 – Positioning and Applications**. The Sub-commissions within Commission 4 have their main tasks in practical applications; their main work, however, is scientifically based. *M. Sideris* suggested the establishment of a Commission 4 subcomponent dealing with the use of GNSS for tectonics and geodynamics. *R. Neilan* agreed to see that a corresponding action be taken. Further *R. Neilan* mentioned the intensive links with relevant sister organizations, e.g., FIG, as well as the emphasis on outreach to make the work known in the scientific community.

*H. Schuh* reminded the EC that according to the Bylaws the Commission’s Steering Committees should have, among others, up to three **representatives of the Services** relevant to the work of the Commission. It was also mentioned that, for the sake of uniformity, all sub-commissions should have Presidents instead of Chairs.

#### **4. Final structure of Services**

The bases of all discussions on topic 4 were the written Service reports available in the IAG Office homepage well before the meeting. The final reports will be published in the Geodesist’s Handbook 2008.

Regarding the nomination of representatives to the EC, *R. Neilan* reminded the EC to observe carefully the Bylaw 6.d (“*The representatives of the Services shall be appointed by the Commission President and Vice-president upon proposal of the Services*”) such that really all fields of interest are covered.

The **IAG Bibliographic Service (IBS)** written report was discussed. *H. Drewes* gave a sketch of this Service which had been established already a long time ago and had mainly been operated by colleagues in the former German Democratic Republic. Later the IBS was transferred to the Federal Agency for Cartography and Geodesy (BKG) in its branch in Leipzig. The main task is the collection of bibliographies, formerly for card indices distributed worldwide, today in digital files. *M. Sideris* raised the question whether it might be useful to connect the IBS directly to the COB instead of keeping it as an independent IAG Service in order to become more visible and operational, i.e., to improve the access and the handling of the data base, and further to install an attractive website under the IAG logo. A representative of the IBS should be invited by the Bureau for the next EC Meeting to report on the progress. The proposal was unanimously accepted.

*S. Kenyon* then presented a summarizing report on all Services related to gravity, earth tides etc. (**IGFS, BGI, ICET, ICGEM, IDEMS, IGES**). *G. Beutler* mentioned a former discussion to have all these Services under the umbrella of the International Gravity Field Service (IGFS), which would provide the focal point in this area. *S. Kenyon* pointed out that a common website is in preparation. *H. Drewes* said that it should be discussed whether the individual Services may be ordered within a hierarchy or all should all be kept independent of each other. *M. Sideris* mentioned that some Services are not – and cannot be – strictly organized according to the IAG Statutes and Bylaws, since they report to and are funded by other organizations or countries. *G. Beutler* and *I. I. Mueller* said that the main purpose should be the contribution to a common goal. Some of the gravity-oriented Services had been created together with new satellite missions and are still rather young in comparison to the Services related to the IERS. *M. Sideris* pointed out that, in addition to organizational issues in each Service, the real constraints concerning man power and finances are to be considered for their long term viability. *M. Rothacher* proposed that all gravity oriented Services should set up a Steering Committee which formulates the objectives and a Central Bureau to coordinate the work. It was unanimously adopted. *S. Kenyon* will formulate the ideas for the general structure of the IGFS with its centres, as well as for a Steering Committee and Central Bureau.

The reports on the geometry oriented Services were given by *M. Rothacher* for the **IERS, ILRS, and IDS**, by *H. Schuh* for the **IVS**, and by *R. Neilan* for the **IGS** and also for the **PSMSL**. There were no major discussions.

## 5. Status of new Services IAS and IDEMS

A short remark on the **International Digital Elevation Models Service (IDEMS)** was given by *H. Drewes*. It is not clear when this Service was adopted by the IAG Executive Committee. A new description to be published in the Geodesist's Handbook is announced by the Director *Ph. Berry*. He emphasized that the access to the products has to be guaranteed like in any other Service.

The status of the **International Altimeter Service (IAS)** was also presented by *H. Drewes*. He reminded everybody of the decision of the EC to set up this Service already in 2003. A Planning Group had been convened by *W. Bosch*, the group met several times, a website as a discussion forum was installed. A problem arises through existing institutions which are intensively engaged in the collection and commercialization of altimeter data, and thus are not prepared to accept any governing board or other hierarchical structure. The call for an IAS Integrating Office in early 2007 had no responses. The IAS has no intention to build up an own data bank, but to enable the geodetic community to have free access to the data in a standardized format in order to generate new products. The IAS could provide formulae and detailed documents which clearly describe the various formats and the way to use the data sets. Summarizing the discussion, *M. Sideris* moved that IAG should establish an IAS Steering Committee with emphasis on the “integration of all concerned groups”. The IAS SC should intensively cooperate with the other IAG Services, GGOS, and the Commissions, and in particular with Commission 2, the IGFS and the existing IAS Planning Group, so as to bring the IAS establishment to a successful conclusion. Independently of the IAS Service, a relevant Sub-commission should be established in Commission 2; both groups would have separate clearly defined tasks. A progress report including a draft of IAS Terms of Reference shall be submitted to the next EC Meeting by the chair of the IAS Planning Group, *W. Bosch*.

## 6. Final structure of GGOS

*M. Rothacher* gave the status of GGOS as also described in the written report. The Steering Committee (at present 33 members) serves as a plenary, however, the practical work is generally carried out by the GGOS EC (6 members). According to the rules, each IAG Commission and Service should nominate one delegate, but up to now not all of them are represented. The ICET (International Centre for Earth Tides) is not included, and this position is taken over by the GGP (Global Geodynamics Project). *M. Rothacher* expressed his opinion that there

is no necessity for a representative from all services but only from those that really are connected to the work of GGOS. *R. Neilan* argued that GGOS represents a kind of an umbrella where all IAG groups should be involved. New in the GGOS structure is a Coordinating Office and three Bureaus for Communication and Networks, Conventions, Models and Analysis, and Space and Satellite Missions. In the discussion *M. Sideris* emphasized the need to make GGOS better known to the public. The use and benefit of GGOS for geodesy and Earth sciences in general are to be described clearly especially on the web. *M. Rothacher* answered that, e.g., NASA or ESA are quite familiar with the objectives of GGOS. The idea of GGOS to investigate the Earth as a whole is highly appreciated especially in connection with monitoring global change. *R. Neilan* added that GGOS represents the first serious attempt to unify all sections of geodesy to observe and describe consistently the whole planet Earth. Concerning the interpretation of the results and especially the prediction of phenomena as future steps, *M. Rothacher* emphasized the need to improve the modelling. *I. I. Mueller* added that GGOS should concentrate its view on global phenomena. The question by *G. Beutler* on the role of GGOS in GEO (Group of Earth Observations) was answered by *M. Rothacher* who stated that GGOS represents the IAG in GEO.

## **7. Final structure of Inter-Commission Committee on Theory (ICCT)**

Speaking on behalf of the President of the ICCT, *N. Sneeuw*, *H. Drewes* explained that the sub-components of the ICCT, i.e., the Study Groups, were already mentioned in the Commissions' reports, because all of them are Inter-Commission SGs. Concerning the Geodesist's Handbook, it has to be observed that all SGs are only described once in the ICCT in order to avoid double descriptions. All SGs will report to the ICCT but the activities should be mentioned in the respective Commissions, too.

## **8. Report of Communication and Outreach Branch (COB)**

*H. Drewes* reported for *J. Ádám*, President of the COB. All colleagues are urgently asked to communicate permanently any kind of information on events or other items which might be of general interest to the COB for publication in the IAG Newsletter. The urgently necessary update of the web page is planned for next month. The COB issued a new leaflet of the IAG, the first copies were distributed. The new IAG membership application form was put on the web site (<http://www.iag-aig.org/attach/IAGMAF2008.pdf>). It was mentioned that the membership generally is scheduled for a four years period, in general between the IUGG General Assemblies. So, more or less all IAG members have to renew their membership. Normally any person who wants to become a member is accepted, however, there should be a plausible relation to geodesy. By this rule it should be avoided to get members who might use this status for aspects which have no relation to science. For the IAG Office *H. Drewes* reported that the payment by cheque will no longer be accepted due to the enormous bank costs, and in the future only direct bank transfer, payment by credit card or cash will be possible. The payment can also easily be transferred by internet. An e-mail will be sent to all members to renew their memberships. *I. I. Mueller* mentioned that the previous IAG Secretary General *C. C. Tscherning* had written letters from time to time to all IAG officers to contribute to the funds. Although no big contributions can be expected, these letters should be repeated in order to try to collect some funds for the IAG. In this context, *J. Ádám* has submitted an article on the recent history of geodesy. The article will be published in the new Geodesist's Handbook.

## **9. Representation of developing countries**

*H. Drewes* reminded everybody of a decision at the General Assembly in Perugia urging the Members at Large to take care of issues of developing countries. A report for Africa has been submitted by *R. Wonnacott* to this meeting. The other regions of the world are missing. *M. Sideris* stated that the African countries are meanwhile in general better organized than before. *R. Neilan* mentioned the technical workshop for AFREF where good progress was made for the installation of observation stations and common projects. The chances for funding the next meetings are rather positive. *Z. Altamimi* said that the maintenance of operations is still a problem; therefore especially the practical work should be supported.

## **10. Relations to other scientific bodies (ICSU, FIG, JBGIS, ...)**

*R. Neilan* mentioned a joint meeting of the **ICSU Ad hoc Strategic Committee on Information and Data (SCID)** to support AFREF. The ICSU confirmed to support the efforts for an open data policy. It was proposed that IAG should submit detailed reports on its work to ICSU, especially the activities of GGOS and the various IAG Services. It should be tried to provide high quality and understandable information on geosciences with easy access for the public. *G. Beutler* suggested to continue the cooperation with the ICSU SCID and moved for *R. Neilan* and *B. Richter* as IAG representatives. The motion was unanimously accepted.

A close cooperation exists with the **Fédération Internationale des Géomètres (FIG)**, e.g. in a joint Symposium with IAG Commission 1 in Munich 2006. This liaison shall be continued. Most contacts are established in the frame of IAG Commission 4 and FIG Commission 5 – Positioning and Measurements.

The **Joint Board of Geospatial Information Societies (JB GIS)** is a coalition of leading international geospatial societies which can speak on behalf of the geospatial profession at international level, especially to the United Nations and other global stakeholders. The current members of the JB GIS are IAG, ICA, FIG, IHO, IMTA, ISCGM and ISPRS. The IAG representative is the President *M. Sideris*, however, attending the meetings has been problematic in the past due to scheduling and teaching conflicts. The COB shall be asked to send the IAG Newsletter regularly to JB GIS.

## **11. Representatives to Services and external bodies**

### **a) Representatives to Services**

*H. Drewes* reminded the EC that the Bylaws require that each Service should have an IAG representative, appointed by the IAG Executive Committee, as a voting member of its Directing or Governing Boards (Bylaw 13c). In some services there are no DBs or GBs. In this case the representation has to be decided with the services. The following list was adopted:

BGI: delegated to Commission 2; BIPM: delegated to Commissions 1 and 2; IBS: see topic 4; ICET: *H. Schuh* confirmed; ICGEM: *M. Rothacher* confirmed; IDS: delegated to Commission 1; IERS: *C. Wilson* confirmed; IGeS: *H. Denker* confirmed; IGFS: *S. Kenyon*; IGS: *G. Blewitt* and *G. Beutler* confirmed; ILRS: ex officio President Commission 1, i.e. *Z. Altamimi*; IVS: *H. Schuh* confirmed; PSMSL: *P. Knudsen* confirmed.

### **b) External Bodies**

#### **IUGG Commissions**

GeoRisk: up to now no official member. *H. Drewes* mentioned that his name is on the mailing list, however, this post would be better a position for GGOS, so GGOS should nominate officially a representative. CMG (Committee on Mathematical Geophysics): delegated to ICCT; SEDI (Study of the Earth Deep Interior): *V. Dehant* appointed. Commission for Data and Information: *B. Richter* and *R. Neilan* confirmed.

#### **Others**

ABLOS (Advisory Board on the Law of the Sea): Additionally to the earlier nominated three representatives (*Ch. Rizos*, *L. Sjöberg* and *D. Grant*), another person has to be nominated. GEO Plenary: ex officio *M. Rothacher*, representatives to the Committees to be nominated by GGOS. ISO (International Organization for Standardization), TC211: ex officio *H. Drewes*, confirmed *J. Ihde*. (The representative of ISO to IAG is *L. D. Hothem*). SIRGAS: *H. Drewes* confirmed; UNOOSA (United Nations Office for Outer Space Affairs): no nomination up to now.

All nominations should be listed in the next Geodesist's Handbook. The representatives have to report to the EC continuously. Their reports are published in the IAG Reports (Travaux) every two years.

## **12. Status of Geodesist's Handbook 2007/2008**

*H. Drewes* mentioned that not all necessary articles and data have been delivered. The deadline is fixed for the end of January 2008. At the moment, some texts are taken from the internet pages of the respective services, it is hoped that they will provide new texts for the Handbook. A longer discussion arose concerning the address list in the Handbook. In the last issue, about 2400 addresses of "officers, fellows and individual members" are listed. These addresses have not been checked since a longer time, so it can be assumed that plenty of them are no more valid. For the existing e-mail addresses, all colleagues will be contacted to confirm within a certain deadline their address. If no response is received, the respective address will be deleted. Furthermore, the EC decided to restrict the addresses to those persons which took part in an IAG conference since Sapporo 2003 as well as those colleagues who explicitly ask for inclusion in the list. *M. Sideris* moved to publish this address list no more in printed form but only in the web where it also can be permanently updated as far as necessary. *I. I. Mueller* argued that especially colleagues in developing countries might not have sufficient access to the web to get the address file, further the list also represents some kind of publicity for geodesy within the community. to publish the list only in the web, but a sentence will be printed in the Handbook offering a hard copy to everybody who

asks for. József Adam also wrote to the national Correspondents in IAG to update the status of their national data centres, and only about 10% of them responded. The list of National Correspondents is also not up to date and few answers are received. *H. Drewes* will look after the latter issue in contact with the IUGG Secretary General.

### **13. Status of Perugia proceedings**

*M. Sideris* reported that a large number of papers submitted to the Perugia Assembly are accepted for publication, and about 20% have been rejected. All papers to be published will be thoroughly reviewed and revised. The work should be finished by February 2008. Texts arriving later will not be considered. It was reminded to cite the Springer series with the official name "IAG Symposia" and not "Proceedings".

### **14. Programme structure of IAG Scientific Assembly, Buenos Aires, 2009-08-31 to 2009-09-04**

*H. Drewes* mentioned that the programme for the next IAG Scientific Assembly has to be set up in time. The Local Organizing Committee has already been established but the Scientific Committee still has to be nominated. *M. Sideris* proposed for the SC the following persons: Commission Presidents or representatives (4 persons), Representatives of the geometric Services (2), Representatives of the gravimetric Services (2), Representative of GGOS (1), Representative of ICCT (1), Representative of LOC (1). The proposed list was unanimously accepted. The Scientific Committee has to define very soon the title for the conference to be used for the first announcement, and the preliminary programme structure has to be set up.

### **15. New IAG fellows**

*H. Drewes* cited a letter of *C. C. Tscherning* reminding the EC that it was forgotten to nominate *B. Richter* as IAG Fellow. He moved for nomination; it was adopted.

### **16. ICSU Grants programme for 2008**

*M. Sideris* informed the EC that every 4 years applications for funding by the ICSU Grants programme can be submitted. The maximum sum amounts to 300.000 EURO or 30.000 per project. *M. Sideris* proposed to ask for funds to support GGOS. *M. Rothacher* should formulate the application.

### **17. Next IAG EC meeting**

The next EC meeting has been scheduled during the EGU General Assembly (Vienna, 13.-18.04.2008). Subsequent consultation with EC members fixed the date to be Saturday, April 19, 2008.

### **18. Any other business**

#### **a) Support of symposia**

The Crete International Symposium on "Gravity, Geoid and Earth Observation, GGEO 2008" (Chania/Crete, 23-27.06.2008) organized by *S. Mertikas* shall be supported. The organizers of this meeting shall put the new IAG logo on the next flyers and other papers as well as the website. *H. Drewes* mentioned an application for support of the 14th General Assembly of WEGENER in Darmstadt/Germany organized by *M. Becker* (15-18.09.2008). Before adopting this, WEGENER has to be included in the IAG structure (as a Project in Commission 3).

#### **b) IUGG meeting**

*M. Sideris* informed that there will be a meeting of IUGG Association Presidents in Karlsruhe, Germany, August 5 and 6, 2008. This meeting should be prepared by the EC with all necessary information. It is a good opportunity to promote the work of IAG within the Union. GGOS has been placed on the agenda and thus the GGOS EC should inform the IAG Bureau of the GGOS-related items that should be raised and discussed at the IUGG meeting in Karlsruhe.

### **19. Adjourn**

*M. Sideris* thanked the participants for their contributions and discussions and closed the meeting at 6:15 p.m.

Respectfully submitted by Hermann Drewes, Secretary General