#### Summary of the Sixth Meeting of the IAG EC 2015-2019

**Place:** Vienna, Austria, Vienna University of Technology, Gusshausstr. 27-29 **Time:** Friday, 13 April 2018, 09:00 – 18:00

Attendees (voting): H. Schuh (IAG President), Z. Altamimi (IAG Vice President), H. Drewes (Secretary General), C. Rizos (IAG Immediate Past President), G. Blewitt (President of Commission 1), R. Pail (President of Commission 2), M. Hashimoto (President of Commission 3), M. Santos (President of Commission 4), P. Novák (President of ICC on Theory), R. Gross (Chair of GGOS), J. Adám (President of COB), R. Barzaghi, A. Nothnagel (Representatives of the Services), Y. Dang, C. Pacino (Members-at-Large)
Attendee (non-voting): F. Kuglitsch (IAG Assistant Secretary General, minute taker)
Guest: J. Kusche (Editor in Chief of the Journal of Geodesy)
Regret: R. Neilan (Representative of the Services)

#### **Summary of Agenda Items:**

#### 1. Welcome and adoption of agenda

The 6<sup>th</sup> IAG EC Meeting in the term 2015-2019 took place on 13 April 2018 on occasion of the EGU General Assembly 2018 at the Vienna University of Technology, Gusshausstr. 27-29 in Vienna, Austria. The agenda was distributed previously by email and was unanimously adopted. *H. Schuh*, the President of the IAG, welcomed the members of the IAG Executive Committee (15 out of 16 voting members, 1 non-voting member and 1 guest) and introduced *Y. Dang* as a new IAG Member at Large and successor of *L. Combrinck*. The EC Members approved the minutes of the 5<sup>th</sup> IAG EC Meeting in the term 2015-2019, which took place on 30 July 2017 in Kobe, Japan.

#### 2. Reports of the Commissions 1, 3, 4

*G. Blewitt* gave the presentation about **Commission 1** (Reference Frames). *He* reported about the work of the four Sub-commissions. *He* further mentioned the work done by the Joint Working Group 2.1 (Relativistic Geodesy) and noted that the next meetings on Reference Frames for Applications in Geosciences (REFAG) and the COSPAR Panel on Satellite Dynamics (PSD) will take place during the COSPAR Assembly in July 2018, in Pasadena, CA, USA. *He* noted that the Working Group 1.2.1 (Offset Detection in Geodetic Coordinate Time Series) was dissolved.

*M. Hashimoto* gave the presentation about **Commission 3** (Earth Rotation and Geodynamics). *He* reported about the work of the five Sub-commissions, and referred to the discussions with IASPEI and IAVCEI in Kobe 2017. *He* proposed dissolving Sub-commission 3.2 (Crustal Deformation) and forming a new Sub-commission 3.2 under the name Volcano Geodesy. The EC members agreed with this change. *H. Drewes* suggested including the work of the previous Sub-commission 3.2 into the Sub-commission 3.5. Both SC 3.2 and SC 3.5 could in future become joint Sub-commissions with IAVCEI and IASPEI, respectively. *He* noted that there would be a symposium on Seismo-Geodesy at the IUGG General Assembly 2019.

*M. Hashimoto* further reported about the work of the Joint Study Group 3.1 (Intercomparison of Gravity and Height Changes) and the Joint Working Group 3.1 (Theory of Earth Rotation and Validation). In addition, *he* noted that all Sub-commissions now have Working Groups and agreed on sending the names of the Working Groups to *H. Drewes* to be included in the update of the Geodesist's Handbook.

Z. Altamimi suggested establishing an Inter-commission project on Marine Geodesy. Later a Commission could be formed. The EC members agreed on establishing such an Inter-commission project and on nominating candidates of possible project members. *M. Hashimoto* agreed on taking the lead of this Inter-commission project.

*M. Santos* gave the presentation about **Commission 4** (Positioning and Applications). *He* reported about the work of the four Sub-commissions and discussed the preparations for the IUGG General Assembly 2019. *He* mentioned that the  $2^{nd}$  Commission 4 Symposium shall be organized in summer 2020. In addition, *he* noted that the collaboration between Commission 4 and IGS should be strengthened, e.g., by establishing joint working groups.

#### 3. Report of the Inter-Commission Committee on Theory

*P. Novák* gave the presentation about **ICCT**. *He* presented the 12 study groups within ICCT and mentioned that JSG0.22 (Definition of next generation terrestrial reference frames) was dissolved in Kobe, Japan, 2017, due to missing output. *He* mentioned that the next Hotine-Marussi Symposium, the major event organized by ICCT, will be organized from 18-22 June 2018, in Rome, Italy, and discussed the scientific program and responsible committees in detail. *H. Schuh* mentioned that *Novel Technologies and Sensors* could become a new study group in ICCT in future. The EC members decided to write a proposal on establishing an Intercommission project on Novel Technologies and Sensors and to find a chair.

#### 4. Report of the Communication and Outreach Branch

*J. Adam* reported about current **COB** activities. *He* highlighted the IAG website, the IAG newsletter, GIM International, Social Media, and the UN GGIM WG (focus group on Outreach and Communication). *He* underlined the need to get regularly news/input for the IAG website, newsletter and social media.

## 5. Report of the GGOS

*R. Gross* gave the presentation about the **Global Geodetic Observing System (GGOS)**. *He* reported about the GGOS Structure, the first GGOS Affiliate (GGOS Working Group of Japan), the GGOS Coordinating Office and its new Manager of External Relations, the GGOS Bureau of Products & Standards and its definition of Essential Geodetic Variables, the roles of GGOS, the GGOS 2020 Book, and the GGOS 2018 Days in Tsukuba, Japan. *He* further noted that GGOS is searching for additional GGOS Affiliates and already reached out to SIRGAS, Korea and Spain. *H. Schuh* mentioned that further products such as the creation of a combined ionosphere map from various geodetic techniques could be solved by GGOS. *Y. Dang* suggested GGOS focusing on some hot topics such as earthquake studies in high-risk areas (e.g., Turkey, Japan, California). *H. Drewes* appreciated the increased scientific activities being realized by GGOS in the recent past beside the administrative work.

#### 6. Report on the Journal of Geodesy

*J. Kusche* gave the presentation about the Journal of Geodesy. *He* reported about changes in the Editorial Board, major numbers and statistics of the Journal of Geodesy, Special Issues, the relationship with Springer Publishing, and the visibility on social media. The EC members, in principle, supported the introduction of Continued Article Publishing (CAP) offered by Springer to shorten the publication time as much as possible. However, it should be clarified

whether it is possible to keep the special issues together in one publication. J. Kusche agreed on asking Springer Publishing about the special issues.

## 7. Status of the IAG Symposia Series

*H. Schuh* noted that *J. Freymueller*, Editor in Chief of the IAG Symposia Series, could not make it to Vienna this time, however, *he* sent an email on the status of the IAG Symposia Series. *H. Drewes* summarized that Springer had explained that it would not make sense to change the name of the IAG Symposia Series to IAG Topical Series, as it would cause major problems with indexing in Scopus and Web of Science of the recent and future volumes. Considering the few papers received for the Kobe Assembly 2017, *H. Schuh* was worried about the future of the IAG Symposia Series. *A. Nothnagel* noted that this could be a consequence of the very long publication process of the Series, that they are not open access, and that they were not indexed in the past. *J. Kusche* suggested getting papers of several pages before an assembly starts (like IAHS is doing). *H. Drewes* agreed on negotiating again with Springer Publishing about the open access of the Series. In the past, it was too expensive.

## 8. Reports of the Services

*R. Barzaghi* reported about recent activities of the following Services related to gravity:

- International Gravity Field Service (IGFS),
- International Gravimetric Bureau (BGI),
- International Service for the Geoid (ISG),
- International Geodynamics and Earth Tide Service (IGETS),
- International Center for Global Earth Models (ICGEM), and
- International Digital Elevation Model Service (IDEMS).

*He* also explained the status of the International Combination Service for Time-variable Gravity Field Solutions (COST-G) as a Product Center within the IGFS.

*H. Schuh* noted that the Service on the International Gravity Reference Frame (IGRF) was just established according to the IAG resolution no. 2 at the General Assembly in Prague 2015; and that the new ToR for the International Combination Service for Time-variable Gravity Field Solutions (COST-G) were received.

A. Nothnagel reported about recent activities of the following Services:

- International Earth Rotation and Reference Systems Service (IERS),
- International VLBI Service for Geodesy and Astrometry (IVS),
- Bureau International des Poids et Mesures (BIPM), and
- Permanent Service for Mean Sea Level (PSMSL).

*C. Rizos* suggested withholding the endorsement of ICRF3 since the cooperation between contributing entities has not been solved. *Z. Altamimi* mentioned that *he* wrote a document about ISO/ITRF. *He* agreed on circulating the document among the EC members.

No report was available from R. Neilan.

*C. Rizos* reported that the IGS Governing Board just met in Vienna and *A. Craddock* is now the director of the Central Bureau. The next IGS workshop will be organized in Wuhan, China, in November 2018.

# 9. Report of the Commission 2

*R. Pail* gave the presentation about **Commission 2**. *He* reported about science meetings and conferences (past & future), the organization of GGHS 2018 (jointly with IGFS), future gravity

missions, and other Commission 2 activities. As an outcome from the IAG Workshop "Satellite Geodesy for Climate Studies" in September 2017, *he* noted that *Satellite Geodesy for Climate Studies* could become a future IAG project.

# 10. International Combination Service for Time-variable Gravity Field Solutions (COST-G)

*H. Schuh* discussed the draft ToR of the International Combination Service for Time-variable Gravity Field Solutions (COST-G). *He* mentioned that all the recommendations made by the EC in Kobe, Japan, 2017, have been considered. The EC members approved the draft ToR of the COST-G in principle allowing further suggestions for revision.

## 11. Reports of the Members-at-Large

*M. C. Pacino* gave the presentation about recent activities in South America. *She* reported about (i) the developments of the Absolute Gravimetric Network in South America (RGAAS), and (ii) SIRGAS, its Working Groups and meetings organized. *She* noted that SIRGAS is celebrating its 25<sup>th</sup> anniversary at the SIRGAS 2018 symposium in Aguascalientes, Mexico, in October 2018. The EC members thanked *H. Drewes* for all his contributions and enthusiasm making SIRGAS a great success for almost 25 years. *M. C. Pacino* further mentioned that *D. Blitzkow* from Brazil is now retired and should be contacted for data/metadata. *R. Barzaghi* offered contacting *D. Blitzkow* concerning these data.

Y. Dang gave the presentation about recent activities in Asia. He reported about Geodetic Activities in Asia in general, and the Chinese Geodetic Community in particular. Moreover, he presented some ideas for setting up regional IAG sub-organizations and a new IAG Commissions on Marine Geodesy. H. Schuh noted that the EC members just agreed on establishing an inter-commission project on Marine Geodesy. He recommended establishing Chinese and other Asian Affiliates to GGOS. He noted that it should be the aim of IAG not to revise the Statutes & By-Laws too often but rather to implement new entities with the existing structure of IAG. He recommended Y. Dang organizing international sessions (in English) at future Chinese Annual Geodetic General Assemblies in order to further strengthening the contact. He suggested Y. Dang asking his colleagues to propose topics for possible new Working Groups.

## 12. IAG strategy discussion

*H. Schuh* summarized the Strategy Discussion from Kobe, Japan, 2017. *He* noted that only little feedback has been received since and *he* asked the EC members to provide further comments. The newest version of the IAG strategy documents should be circulated soon. Topics such as *Marine Geodesy* and *Novel Technologies and Sensors* have already been implemented. *H. Drewes* mentioned that the final document should be presented to the Council on occasion of the IUGG General Assembly in Montreal, Canada, July 2019. *He* proposed having the document ready at the next EC Meeting on occasion of the AGU Fall Meeting in Washington, DC, USA, in December 2018.

## 13. Status of the IUGG General Assembly, Montreal, Canada, 2019-07-08 ... 19

*H. Drewes* presented the status of Union Lectures, Union Symposia, Joint Symposia, and IAG Symposia being prepared by the Scientific Program Committee for the IUGG General Assembly 2019 in Montreal, Canada. *He* noted that the final deadline for the description of the

association symposia is on 15 May 2018, and urged the IUGG2019 symposia conveners to provide them by the end of April 2018.

## 14. (Joint) IAG Scientific Assembly 2021

*H. Drewes* informed the EC members that *he* received an invitation from IAGA and IASPEI to join their planned Joint Scientific Assembly 2021 in Hyderabad, India. *He* explained that, for organizational reasons, it would in general be better to decide on the venue of the IAG Scientific Assemblies not at the previous IUGG General Assemblies (i.e., 2 years in advance) as in the past, but rather 3-4 years in advance. *He* therefore sent a Call for Bids for hosting the IAG Scientific Assembly 2021 to the IAG Council. By the deadline 12 April 2018, *he* received bids from India and China. The EC members decided to establish a *Site Evaluation Committee* which reviews the bids received and send a report and shortlist of suitable venues to *H. Drewes* by 15 June 2018. The Council should be asked for discussion and voting by 31 July 2018.

## 15. Revision of the IAG Statutes and Bylaws

*C. Rizos* gave a presentation about the proposed changes to the IAG Statutes and By-Laws. *He* reported about proposed name changes, minor modifications that are necessary because of the IAG Strategy process and proposals for an IAG reform. *C. Rizos* offered asking the Adhering Bodies, National Delegates, Officers, Fellow and Members to get further suggestions for revision. *H. Schuh* mentioned that a final version of the proposed changes to the IAG Statutes and By-Laws should be ready by 30 November 2018, to discuss them at the next EC Meeting in December 2018. *H. Drewes* noted that only the Council could change the By-Laws.

## 16. Nomination procedure for officers 2019-2023

*C. Rizos* gave a presentation about the nomination procedure and the proposed timeline for the IAG officers 2019-2013. *H. Schuh* suggested establishing a *Search Committee*, which contacts possible candidates for the IAG Secretary General and finally gives a recommendation to the Council. The *Search Committee* should be in close contact with the Nominating Committee. The EC members decided in favor of establishing such a *Committee* and approved the IAG Bureau Members and the Chair of the Nominating Committee as the members.

# 17. Report from IUGG and ICSU

*F. Kuglitsch* reported about the status of the IUGG Member Countries, recent changes of the IUGG Statutes and By-Laws, new IUGG Liaison Officers, IUGG as an Observer Organization of the Intergovernmental Panel on Climate Change (IPCC), IUGG Meeting Support 2018-2019, Preparations and Deadline for the IUGG General Assembly 2019, the Scientific Assemblies 2021, and news from ICSU. *He* noted that the deadlines for submitting nominations for the IUGG Early Career Scientist Awardees, the IUGG Fellows, and the IUGG Gold Medalist are on 20 June, 20 September, and 20 October 2018, respectively.

## 18. Liaisons with international scientific and professional bodies

*H. Drewes* discussed the list of IAG Representatives to Scientific Bodies available at https://iag.dgfi.tum.de. *He* invited the EC members to look at the list and make suggestions for changes, if any. *He* mentioned that *R. Gross* is the new IUGG Liaison Officer to GEO. *H. Schuh* noted that IGS should appoint a representative to ICG, which has to be nominated by GGOS.

#### 19. IAG representatives to the Services

H. Drewes mentioned that the EC elected O. Titov as the new IAG Representative to the IVS.

#### **20. IAG sponsored meetings**

*H. Drewes* discussed the list of IAG sponsored meetings, the latest version of which can always be found at the IAG Office Homepage (https://iag.dgfi.tum.de).

#### 21. Any other business

*H. Schuh* mentioned that *he*, together with *Z. Altamimi*, just attended a meeting of UN-GGIM at the United Nations in Vienna, where the five Working Groups presented their results. UN-GGIM would like to finalize its Implementation Plan with the next 3 months. He noted that UN-GGIM wants to change the ToR of the Sub-committee of Geodesy. *Z. Altamimi* suggested writing a corrigendum to change the ToR again.

*H. Drewes* noted that IAG has currently more than 200 individual members, but only few student members. *He* urged the EC members to advertise IAG at their universities to get more student members.

*J. Adam* suggested adding a line on the IAG Membership Application Form, where it says "I agree that my data is stored internally". This is necessary to follow an EU regulation getting effective in May 2018.

#### 22. Next IAG EC meeting

The EC members decided to hold the next IAG EC meetings (i) on occasion of the AGU Fall Meeting 2018 on Monday, 10 December 2018, in Washington, DC, USA, and (ii) on occasion of the IUGG General Assembly 2019 on Monday, 8 July 2019, in Montreal, Canada.

#### 23. Adjournment

H. Schuh thanked the participants for their contributions and closed the session at 18:30.

Respectfully submitted F. Kuglitsch, Assistant Secretary General H. Drewes, Secretary General