

# Summary of the IAG Executive Committee Sessions

**Hermann Drewes** (Secretary General) • **Franz Kuglitsch** (Assistant Secretary)

**Place:** Palais des Congrès in Montréal, Québec, Canada, Floor 5, Room 522B

**Time:** 2019, July 9, 08:30-18:00 (Topics 1-17), July 12, 18:00-20:00 (Topics 18-28) and July 15, 18:00-20:00 (Topics 29-40)

**Attendees** (voting): H. Schuh (IAG President), Z. Altamimi (IAG Vice President), H. Drewes (IAG Secretary General), C. Rizos (Immediate IAG Past President), G. Blewitt (President Commission 1), R. Pail (President Commission 2), C. Huang (Vice President Commission 3, temporarily), M. Santos (President Commission 4, temporarily), P. Novák (President ICC on Theory), R. Gross (Chair of GGOS), J. Adám (President of the COB), R. Barzaghi and A. Nothnagel (Representatives of the Services), Y. Dang (Member-at-Large, temporarily).

**Attendees** (non-voting): F. Kuglitsch (IAG Assistant Secretary General, minute taker, temporarily), M. Sideris (IAG Past President).

**Guests** (temporarily): M. Poutanen (IAG Secretary General 2019-2023), J. Müller (Chair of the Planning Group for a new IAG Subcomponent on Novel Sensors and Technologies), C. K. Shum (Chair of the Planning Group for the Re-establishment of the International Altimetry Service), G. Dick (Deputy of the Assistant Secretary General, minute taker), J. Kusche (Editor-in-Chief of the Journal of Geodesy), J. Freymueller (Editor-in-Chief of the IAG Symposia Series), A. Eicker (Chair of the Planning Group for the Inter-Commission Committee on Geodesy for Climate Research).

**Regrets:** M. Hashimoto (President Commission 3), R. Neilan (Representative of the Services), M.C. Pacino (Member-at-Large).

## Summary of Agenda Items:

### 1. Welcome and adoption of agenda

The 8th IAG EC Meeting in the term 2015-2019 took place on the occasion of the IUGG General Assembly 2019 at the Palais des Congrès, room 522B, in Montréal, Canada, on July 9, 12 and 15, 2019. The agenda was distributed previously by e-mail and was unanimously adopted. *H. Schuh*, the President of the IAG, welcomed the members of the IAG Executive Committee in the first session (11 out of 16 voting members, 2 non-voting members and 4 guests). The EC Members approved the minutes of the 7th IAG EC Meeting in the term 2015-2019, which took place on 10 December 2018 in Washington DC, USA.

### 2. IUGG2019 organizational issues

*H. Drewes* summarized the organizational issues of IUGG. He reported about (i) IAG's involvement in the science program (incl. IAG Symposia, Joint-Symposia, poster sessions) compared to previous IUGG General Assemblies and compared to other Associations, (ii) IAG Business Meetings, and (iii) IUGG and IAG Travel Grants (IAG paid nearly CAD 40,000).

### 3. Agenda of the Council meetings, July 10, 08:30–10:00 & July 16, 18:00–20:00

*H. Drewes* presented and discussed the agenda of the Council Meeting. *H. Schuh* noted that IAG Strategy Document is now finished and should be approved by the Council.

### 4. Agenda of Opening and Closing Sessions, July 11, 18:00–20:00 & July 17, 15:00–16:30

*H. Drewes* presented and discussed the draft agenda of the Opening and Closing Sessions.

### 5. Proposal for members of the Audit Committee TBD by the Council

*H. Drewes* presented and discussed the list of proposed members of the Audit Committee, which has to be appointed by the IAG Council. *H. Schuh* noted that the members of the Audit Committee should be IAG Council Delegates or National Correspondents, and should preferably represent all continents. *M. Sideris* suggested asking some more people before the Council Meeting starts.

### 6. Nomination of members of the Resolution Committee for IAG and IUGG

*H. Drewes* presented and discussed the proposed members of the Resolutions Committee, which has to be appointed by the IAG Council. They should represent all IAG Commissions, GGOS, continents and gender. *H. Schuh* noted that IAG has received so far two proposals for resolutions, which should be approved by IAG: (i) on the 3rd realizations of the International Celestial Reference Frame (ICRF), which was already approved by the International Astronomical Union (IAU) in 2018, and (ii) on the improvement of the Earth Rotation Theories and Models. In addition, a resolution on the International Terrestrial Reference Frame (ITRF) was proposed, which should be approved by IAG and IUGG.

### 7. Levallois Medal, Guy Bomford Prize, Young Authors Award, new IAG Fellows

*H. Drewes* presented the list of proposed IAG awardees and fellows. *He* noted that *C. Reigber* (Germany) will be awarded the Levallois Medal 2019, the Guy Bomford Prize will be given to *M. Splak* (Australia), and the Young Authors Awards will be given to *M. Xu* (China; 2017) and *A. Peidou* (Canada; 2018). *H. Schuh* encouraged the EC Members to nominate more scientists for IAG Awards in future. *H. Drewes* said that the deadline for nominating additional IAG Fellows is before the last EC meeting on Monday, July 15, when the EC shall appoint the Fellows officially. They will be presented at the Closing Session on Wednesday, July 17. *M. Sideris* proposed giving the Young Authors Awardees in future a lecture at the General Assembly and introducing clear criteria on how to become an IAG Fellow.

### 8. Results of the 2019 IAG Officers election process

*C. Rizos* gave the presentation of the results of the 2019 IAG Officers election process. He reported about (i) procedures for nominations and elections, (ii) the Nominating Committee, (iii) the nomination process, (iv) the election results for IAG Officers (2019-2023), and (v) issues to be considered in future. *H. Schuh* noted that IAG should definitely go for electronic voting in future, and that the two-

step procedure in the election process when there are more than two nominations should be supported to get absolute majorities. He suggested starting the election process earlier in future.

### 9. Report on the review of the IAG Statutes and Bylaws (Cassinis Committee)

*C. Rizos* reported about (i) the tasks of the so-called Cassinis Committee, (ii) the proposed (minor) changes to the IAG Statutes and Bylaws, and (iii) issues to be considered in future. The EC Members made a few further minor changes to the IAG Statutes and Bylaws. *H. Schuh* suggested that nominations of candidates for the position of the GGOS President should be made by the GGOS Coordinating Board in consultation with the EC Members. The EC Members agreed on adding this change to the Bylaws. The final version of the revised IAG Statutes and Bylaws will be approved by the IAG Council. *C. Rizos* suggested considering to include the expectations of the National Correspondents and Adhering Bodies in the Bylaws.

### 10. Status of IAG Report 2015-2019 (Travaux de l'AIG 2015-2019)

*H. Drewes* gave a presentation about the status and content of the IAG Report Vol. 41 (Travaux 2015-2019). The final version will be available at the IAG Office Homepage. He further noted that very few countries submitted National Reports. The EC Members agreed on introducing a DOI for the Travaux (possibly via the library of the GFZ German Research Centre for Geosciences). *H. Drewes* confirmed that all Springer publications have a DOI.

### 11. Reports and recommendations of the Commissions

*J. Müller* gave a presentation about the status of the Planning Group for a new **IAG Project** on Novel Concepts and Quantum Technology in Geodesy and the proposed Terms of Reference. He reported about (i) new approaches to observe the Earth gravity fields, and (ii) the preliminary structure of the new entity incl. possible working groups. The EC Members approved the progress made by the Planning Group and asked *J. Müller* (i) to develop a formal structure of this new entity, and (ii) prepare final terms of reference to be approved at the next IAG EC Meeting in December 2019 in San Francisco CA, USA. *G. Blewitt* and *H. Schuh* suggested considering optical clocks in this project, and emphasizing the novel sensors besides the quantum technology in the title. *J. Müller* agreed on including these issues. The EC Members agreed on renaming the IAG Project to *Novel Sensors and Quantum Technology for Geodesy*.

*G. Blewitt* gave the presentation about **Commission 1** (Reference Frames). *He* summarized (i) the activities of Commission 1 between 2015 and 2019, (ii) the structural components of Commission 1, and (iii) suggestions for the future.

*R. Pail* gave the presentation on **Commission 2** (Gravity Field). *He* reported about (i) recent activities of Commission 2, and (ii) the proposal to establish an Inter-Commission Committee on “Geodesy for Climate Research” (ICCC) incl. objectives, planned activities.

On behalf of *M. Hashimoto*, *R. Gross* gave the presentation about **Commission 3** (Earth Rotation and Geodynamics). *He* reported about (i) the activities of the five Sub-commissions, Joint Study Groups, Joint Working Groups, (ii) the proposal to establish an Inter-Commission Committee on Marine Geodesy (ICCM). *H. Schuh* noted that Sub-commissions 3.2 and 3.5 should be strengthened in future, as the volcanology and seismology communities are very active in this field. *H. Drewes* said that according to the discussion with IASPEI, Subcommission 3.5 would become an Inter-Association Sub-Commission (in IAG) or Commission (in IASPEI) on Seismo Geodesy. A meeting is planned with IASPEI on July 13, 18:00 (after the Joint Symposium JS04 Seismo-Geodesy) or on July 14, 18:00. The EC Members approved the establishment of an Inter-Commission Committee on Marine Geodesy (ICCM), and asking Yuanxi Yang to develop a formal structure and draft terms of reference.

On 12 July, *A. Eicker* reported about her ideas to establish an **Inter-Commission Committee on Geodesy for Climate Research (ICCC)**. She reported about (i) the importance of geodesy for climate research, and (ii) possible objectives and planned activities of ICCC. *Z. Altamimi* asked *A. Eicker* to contact the Commissions to get more people involved in ICCC. In addition, he suggested focusing on a few major topics. *H. Schuh* noted having 4-5 working groups is a good start. *R. Gross* suggested including the GGOS Chair of the Science Panel in the ICCC activities. The EC Members established the Inter-Commission Committee on Geodesy for Climate Research (ICCC) and appointed *A. Eicker* as ICCC President for the period 2019-2023. The EC Members asked *A. Eicker* to finalize a formal structure and to draft terms of reference of ICCC until the IAG EC Meeting to be held in December 2019 in San Francisco CA, USA.

*H. Schuh* summarized the presentation about **Commission 4** (Positioning & Applications; as prepared by *M. Santos*). *He* reported about (i) the activities of Commission 4 between 2015 and 2019, (ii) recommendations for the next

term, and (iii) the 2nd Commission 4 Symposium to be organized in September 2020 in Potsdam, Germany.

## 12. Report and recommendations of the ICCT

*P. Novák* gave a presentation about the ICCT. *He* reported about (i) the activities of the ICCT study groups between 2015 and 2019, (ii) the ICCT website, (iii) the Hotine-Marussi 2018 Symposium and its proceedings, and (iv) recommendations for the next term. The EC Members agreed on asking *J. Kusche*, Editor in Chief of the Journal of Geodesy (JoG), to include a member of ICCT to the JoG Editorial Board.

## 13. Appointment of the ICCT President for the period 2019-2023

The EC Members re-appointed *P. Novák* as ICCT President for the period 2019-2023.

## 14. Report and recommendations of the Services' representatives

*C. K. Shum* reported about the rationale, objectives, terms of reference, and future steps to reestablish the International Altimetry Service (IAS). *He* confirmed that IAS should provide a combined product of various analysis centers. *H. Drewes* urged to define clearly the products. *H. Schuh* suggested including people who already have experience in running IAG Services. The EC Members asked *C.K. Shum* to develop a formal structure and to draft terms of reference of the new IAS until the IAG EC Meeting in San Francisco CA, USA, December 2019.

*R. Barzaghi* gave the first presentation about the Services. *He* (i) reported about the activities of the International Gravity Field Service (IGFS) between 2015 and 2019 including the International Gravimetric Bureau (BGI), International Service for the Geoid (ISG), International Geodynamics and Earth Tide Service (IGETS), International Center for Global Earth Models (ICGEM), International DEM Service (IDEMS), and International Combination Service for Time-variable Gravity Field Solutions (COST-G), and (ii) gave recommendations for future topics. *Z. Altamimi* offered asking *T. Otsubo* to report on topics related to gravity in future. The EC Members agreed. *H. Schuh* noted that COST-G is a product center of IGFS. *R. Barzaghi* agreed on sending an updated slide.

*A. Nothnagel* gave the second presentation about the Services. *He* (i) reported about recent activities of the International Earth Rotation and Reference Systems Service (IERS), International GNSS Service (IGS), International Laser Ranging Service (ILRS), International VLBI Service for Geodesy and Astrometry (IVS), and Permanent Service

for Mean Sea Level (PSMSL). *He* further presented the revised terms of reference for the International VLBI Service for Geodesy and Astrometry (IVS). IVS would like to introduce a new “Office for Outreach and Communications”. *H. Schuh* noted that this outreach team should be well linked to the communication and outreach entities of IAG, GGOS etc. *H. Schuh* also noted that having 17 people in the IVS Directing Board is a lot and might become inefficient. The EC Members approved the revised IVS terms of reference unanimously.

### 15. Report and recommendations of GGOS

*R. Gross* gave a presentation about the current activities of the Global Geodetic Observing System (GGOS). *He* reported about (i) the GGOS Structure, (ii) the new GGOS Affiliate “GGOS Japan”, (iii) the GGOS 2018 Days in Tsukuba, Japan, (iv) the Committee on Essential Geodetic Variables (EGVs), (v) the Working Group on DOIs for Geodetic Data Sets, (vi) GGOS External Relations, and (vii) the 2019 meetings calendar. *He* noted that within the last 1.5 years, the visibility of geodesy within the Group on Earth Observations (GEO) has increased a lot. *H. Schuh* clarified that GGOS has the mandate to represent IAG at the GEO Programme Board. In addition, *M. Sideris* represents IUGG within GEO. *H. Schuh* noted that it would be good for GGOS to have its own products.

### 16. Appointment of the GGOS Chair for the period 2019-2023

*R. Gross* gave a presentation about the process of finding a new GGOS Chair for 2019-2023. Only one candidate was nominated so far. *Z. Altamimi* and *H. Schuh* suggested postponing the election to find at least two additional candidates. *H. Schuh* noted that GGOS is IAG’s flagship component and that the GGOS Chair has to do two business trips per year. The EC Members agreed on (i) postponing the election of the GGOS Chair 2019-2023 to find at least two additional candidates, (ii) offering IAG travel support to EC Members from developing countries (if needed), and (iii) clarifying with the Audit Committee if IAG travel support could be also provided to the GGOS Chair (who has exceptional responsibilities).

### 17. Report of the COB

*J. Adám* reported about current COB activities. *He* highlighted (i) the activities of the COB between 2015 and 2019, (ii) the IAG website, (iii) the IAG newsletter, (iv) GIM International, (iv) social media activities, and (v) the UN GGIM WG (focus group on Outreach and Communication). *R. Pail* suggested hosting the Commission websites centrally as part of the IAG website. Then, the Commission websites would not have to move

with the Commission Presidents from one institution to the next. In addition, nowadays many institutes have legal restrictions to host such websites, as they are responsible for the content. *J. Adám* agreed on asking *S. Rozsa* whether it would be possible to host the Commission websites as part of the IAG website.

### 18. Report of the Members-at-Large

There were no reports available from the Members-at-Large.

### 19. Report of the Journal of Geodesy Editor-in-chief

*H. Drewes* summarized the presentation of the Journal of Geodesy Editor-in-Chief, *Jürgen Kusche*. The report includes (i) proposed changes of the Editorial Board 2020-2023, (ii) numbers of submitted and accepted manuscripts and the reviews, the impact factor and top ranking of highest citing of the Journal of Geodesy, (iii) Special Issues planned, (iv) editorial practices and new policies. The EC members congratulated the Editorial Board on the high impact factor of the Journal of Geodesy.

### 20. Proposal of the new Board of Editors of JoG by the old Board

*J. Kusche* presented the proposed changes of the Editorial Board 2020-2023. There is no limit in the number of editors. *He* noted that next week there will be a meeting of the Editorial Board to discuss next steps. In addition, the Editorial Board will elect the Editor-in-Chief. The EC Members discussed the suggested new members of the Editorial Board and kept the composition as proposed.

### 21. Report of the Editor of the IAG Symposia Series

*J. Freymueller* gave the presentation about the IAG Symposia Series. *He* reported about (i) the symposia volumes that have been published since 2013, (ii) the review process, and (iii) the future outlook incl. open access and the IUGG2019 Montreal Volume.

### 22. Proposal of the 2019-2023 Editor and Assistant Editor of the IAG Symposia Series

On 15 July 2019, *J. Freymueller* mentioned that *he* would be willing to continue as the Editor-in-Chief of the IAG Symposia Series for 2019-2023. Also, *L. Sanchez* would be willing to continue as Assistant Editor.

### 23. Report on the UN-GGIM (Subcommittee on Geodesy, GGRF, GGIM-GS)

*H. Schuh* noted that UN-GGIM is in the process of establishing a Global Geodetic Center of Excellence based on a 2015 resolution. IAG is actively contributing through *Z. Altamimi*, *R. Gross* and *H. Schuh*. The future goal should

be to have a UN convention on geodesy. He mentioned that the colleagues from the United Nations are often not aware of what kind of geodetic products and services already exist.

#### **24. Report on IUGG activities**

*F. Kuglitsch* reported, that since the last EC Meeting in December 2018, most of his activities were related to (co)organizing this IUGG General Assembly 2019. *He* mentioned that there are four candidate cities to host the IUGG General Assembly 2023: Athens, Berlin, Geneva, and Guadalajara. The candidates presented their bids today, and the IUGG Site Comparison Committee will announce tomorrow a shortlist of the top two candidates the IUGG Council can vote on. *He* invited the EC Members to attend this IUGG Award Ceremony. *H. Schuh* noted that the Chair of the IUGG Finance Committee mentioned in his presentation to the IUGG Council that there is no audit of the money that goes from IUGG to its Associations, which corresponds to around 50% of the total IUGG budget. *F. Kuglitsch* mentioned that getting a professional audit of the IUGG Budget by e.g., PWC, EY, would cost IUGG around 20% of its total budget. For this reason, IUGG will most likely not hire a professional auditor in future. *H. Schuh* suggested IUGG nominating a member in the audit committees of the Associations.

#### **25. Reports on liaised bodies (ABLOS, IAU Comm. 19, GEO, ISO, UN)**

*H. Drewes* summarized the reports received from liaised bodies including ABLOS, GEO, IAU Commission 19, ISO, and UN-GGIM-Geospatial Societies.

#### **26. Appointment of IAG Representatives to IAG Services, IUGG Commissions & others**

*H. Drewes* discussed the list of IAG Representatives to Scientific Bodies. The EC Members agreed on the list of representatives; however, the new EC may revise the list. In particular, another representative to the International DORIS Service (IDS) has to be appointed. *F. Kuglitsch* noted that IUGG Commission Chairs were informed about the nominated IAG representatives and will invite them to their business meetings during the IUGG General Assembly. There, the future membership of a Commission will be decided. *He* further noted that the future of the IUGG Committees and its members will be discussed by the newly elected IUGG Bureau. If new Committee members are needed, the Associations will be informed.

#### **27. Status of the IAG Scientific Assembly 2021**

*Y. Dang* gave a presentation about the status of organizing the IAG Scientific Assembly 2021 to be held in Beijing, China, from June 28 to July 3, 2021. *H. Drewes* noted that

the IAG Secretary General (2019-2023) will be the Secretary of the IAG Assembly. In 2020, he should visit the venue and make organizational arrangements. All symposia should be led by IAG. There will not be any joint symposia with other Associations. *He* mentioned that there should be only two (or three at the very maximum) parallel sessions. In total, having three big (for up to 700 people) and five smaller rooms for business meetings should be sufficient.

#### **28. Any other business**

*H. Schuh* noted that there are still candidates available for nomination of GGOS Chair, given that IAG can provide travel support.

#### **29. Actual status report**

*H. Schuh* summarized the major outcomes of the IUGG Executive Committee and Council Meetings and presented first numbers of the General Assembly 2019. In addition, *he* mentioned the three resolutions adopted by IUGG. *He* informed that the next IUGG General Assembly will be held 2023 in Berlin, Germany, and that the Associations should report to IUGG about possible improvements. *F. Kuglitsch* noted that there is an ongoing discussion about further reducing the number of days of the General Assembly.

#### **30. Approval of the new Board of Editors of the JoG**

*J. Kusche* presented the new Board of Editors of the JoG. *He* noted that the old Board of Editors approved the newly suggested members. *He* will continue as Editor-in-Chief. The EC Members approved the new Board of Editors of the JoG unanimously. *H. Drewes* noted that the new contracts between Springer and the IAG w.r.t. the Journal of Geodesy and the IAG Symposia Series should be signed by the new IAG President and Secretary General.

#### **31. Approval of the Editor-in-Chief and Assistant Editor-in-Chief of the IAG Symposia Series**

The EC Members approved *J. Freymueller* and *L. Sanchez* as the Editor-in-Chief and Assistant Editor-in-Chief for 2019-2023 unanimously.

#### **32. Summary of the Report of the Audit Committee**

*H. Drewes* noted the report of the Audit Committee will be presented to the Council tomorrow.

#### **33. Report of the IAG Resolution Committee**

*R. Gross* gave a presentation about the five IAG Resolutions, and further discussed them with the EC Members. *He* noted that the Resolution 1 on the ITRF was identically submitted to IUGG. The EC Members agreed on changing the title of resolution 4 to "Establishment of the

Infrastructure for the International Gravity Reference Frame”.

#### **34. Discussion of proposed resolutions for approval by the IAG Council**

The EC Members proposed the IAG Council to adopt the five resolutions.

#### **35. Status of reviewed Statutes and Bylaws**

*J. Freymueller* noted that the two steps election procedure part was rephrased for clarity. The EC Members agreed that in case of an election tie, only the President should break the tie. *J. Freymueller* agreed on sending the latest version to the EC Members.

#### **36. Sponsorship of symposia and workshops**

*H. Drewes* summarized the upcoming IAG Events. *He* noted that if a meeting gets sponsored by IAG, early-career scientists can apply for IAG Travel Awards.

#### **37. Preparation of the IAG Closing Session**

*H. Drewes* summarized the agenda of the IAG Closing Session (see agenda item 4) and asked all symposia conveners to prepare a brief report on the highlights.

#### **38. Any other business**

*H. Schuh* noted that there is interest of IAGA and IASPEI for organizing a joint Scientific Assembly together with IAG in 2025 in Lisbon, Portugal, which should be considered in future.

#### **39. Appointment of Honorary Officers (President, Secretary General, Fellows, Bylaws 22)**

The EC Members discussed and approved the final list of new IAG Fellows (available at IAG web site). The EC Members appointed *H. Schuh* as IAG Honorary President and *H. Drewes* as IAG Honorary Secretary General.

#### **40. Closing the EC of the legislative period 2015-2019**

*H. Schuh* presented his ideas for the future and concluding remarks as IAG President, and he thanked especially *J. Adam* for being President of the COB for 16 years, and *H. Drewes* for being IAG Secretary General for 12 years. He thanked the EC Members for their contributions over the last term and closed the session at 20:00. The EC Members thanked *H. Schuh* for his dedication over the last years.