

International Academy of Astronautics

Commission 5

Report on Meeting

**IAA HQ, Paris, France
Monday 18 March 2013
14:30-17:00**

1. Welcome

There were 13 participants in attendance, including 7 members of the Commission:

Max Grimard (Chair), Corinne Jorgenson (Vice-Chair), Jacques Masson, Elisabeth Back-Impallomeni, Bernhard Schmidt-Tedd, Ciro Arevalo-Yepes, Oleg Ventskovsky, Ray Williamson, Claire Jolly, Charlotte Mathieu, Kazuto Suzuki, Sergey Teselkin, Geir Hovmork

The Chair opened the meeting .

2. Adoption of the Agenda

The meeting's agenda was adopted as distributed by e-mail on 7 March 2013. It is available from the IAA website.

3. Adoption of the Minutes of Commission 5 Meeting in Napoli, 2 October 2012

The minutes of the previous Commission 5 meeting were adopted, as available from the IAA website.

4. Summary Status of IAA Conferences and on going Study Groups

4.1 Symposium E3 at IAC 2013 Beijing and IAC 2014 Toronto

Symposium E3 at IAC 2013 received a total of 85 abstracts (58 in 2012) :

#	Session Title	# Abstracts
E3.1	National space policies and programmes, and regional cooperation	34
E3.2	International space exploration	16
E3.3	Industrial Policies as Drivers of the Space economy	19
E3.4	Assuring a safe, secure and sustainable space environment for space activities	16

As a reminder the focus of Sessions E3.1, E3.2 and E3.4 was chosen to support the on-going Studies. On that respect the large number of abstracts is quite encouraging for these studies.

For Symposium E3 at IAC 2014, the general structure shall be kept, i.e. E3.1 for global Policies and programmes, E3.3 for Space Economy, and E3.5 for IAA/IISL roundtable. It was agreed to keep also the same focus for E3.1 (i.e. Regional Cooperation), and the same scope for E3.2 (Exploration) and E3.4 (Space Sustainability), in to continue support to the on-going studies under the umbrella of Commission 5, which will not have been achieved at this date. M. Grimard reminds that the IAA management has decided that all proposals for IAC Symposium shall be sent to SAC Vice-Chair Conferences B. Suresh, and not sent directly to IAF. As a consequence, the detailed descriptions of each session shall be sent by the end of April 2013 to Commission 5 chair, who will deliver the global proposal to SAC Vice-Chair Conferences.

4.2 IAA-IISL Scientific-Legal Roundtable at IAC 2013 Beijing and IAC 2014 Toronto

The 28th IAA/IISL Scientific-Legal Round Table at the IAC 2013 in Beijing will be on the theme “Space and the polar regions - issues of satellite applications, policies and regulations”:

Co-Chairs:

Geir Hovmork, Norwegian Space Centre, Norway

Kai-Uwe Schrogl, ESA, France

Rapporteur:

Marc Haese, DLR, Germany

Confirmed speakers:

Stephan Hobe, University of Cologne, Germany

Isabelle Duvaux-Bechon, ESA, France

Lauren Small, CSA, Canada

Bo Andersen, Director General, Norwegian Space Centre and Chairman, Norwegian National Committee on Polar Research, Norway

Jean-Francois Petit, Astrium, France

TBD from JAXA

The topic for the 29th IAA/IISL Scientific-Legal Round Table at IAC 2014 will be about the misuse of satellite data e.g. by users or operators, a topic related to space security.

4.3 Symposium A6 at IAC 2013 Beijing and IAC 2014 Toronto

Symposium A6 at IAC 2013 received a total of 151 abstracts :

#	Session Title	# Abstracts
A6.1	Measurements	15
A6.2	Modeling and risk analysis	28
A6.3	Hypervelocity impacts and protection	15
A6.4	Mitigation and standards	14
A6.5	Space Debris removal issues	16
A6.6	Space Debris removal concepts	40
A6.7	Operations in Space Debris environment	11
A6.8	Political, economic and institutional aspects (with IAF Space Security Committee)	12

Similar structure is targeted for IAC 2014.

4.5 Other Conferences

The 6th European Conference on Space Debris co-organized with ESA will be held in Darmstadt, Germany, on 22-26 April 2013.

In the frame of the Space Summit activities, a joint conference with IISL on “Climate Change and Disaster Management Space Data Sharing and Dissemination”. Commission 5 shall be an active support to the organisation of this conference.

4.6 SG5.5 Space Debris Environment Remediation

The SG5.5 report has been completed, reviewed and sent for approval by the SAC. The publication process shall follow soon, with CNES as sponsor.

4.7 SG5.9 International Cooperation on Space Weather

There has been no progress since October 2012, and W. Balogh confirmed he is no longer able to manage the study. After formal approval by Commission 5, the study will be proposed for cancellation.

4.8 SG5.10 Orbital Debris Removal: Legal, Political, Policy, and Economic Considerations

The study detailed outline was ready for a first discussion with potential contributors during the Spring 2012 meetings in Paris, on March 18. More people than imagined have expressed interest and are ready to start. The co-chairs are R. Williamson, S. Hobe, and L. Jane-Smith.

4.9 SG5.11 Comparative assessment of regional cooperation in space : policies, governance and legal tools

The study was approved by the SAC early 2013. It is chaired by C. Arevalo, E. Back-impallomeni, S. Murthi, and the kick-off will take place on March 19, 2013 in Paris. A working plan will be distributed. Interactivity with IISL and IAF will be looked at. It is the intent of the study leadership to use as much as possible the IAA Regional Meetings to feed the study.

4.10 SG5.12 Dynamics of Space Exploration Strategies and Future Outlook

The study was approved by the SAC early 2013. It is chaired by P. Ehrenfreund and N. Peter. It is intended to deliver intermediate results for the benefit of the IAA Space Summit on Exploration next January 2014 in Washington. A coordination meeting with the Summit Coordination Group will take place on March 19.

5. DISCUSSION : Commission 5 contributions to IAA Space Summits preparation, through Study Groups and/or Conferences

M. Grimard presented the work plans of the 4 Coordination Groups for the IAA Space Summits preparation (see Appendix), as a support for the discussion. The main findings from the discussion were the followings.

Human Space Flight and Planetary Exploration

C. Jolly informed that she is contributing to the study on Private Human Spaceflight, and that she will foster the interest of the Space Economy community for this topic.

J. Masson expressed doubts about the added value of a study on “International protocols to handle crisis/emergency of astronauts in LEO”, since a lot has been done and is still being discussed in the frame of the on-going international cooperation.

K. Suzuki will inform the participants to the PECB (Protection of Environment of Celestial Bodies) study released in 2011, about the topic “Planetary Protection Guidelines for Human Spaceflight”, in order to guarantee continuity of IAA position.

The topic “Strengthen cooperation between new and emerging space faring nations” shall be strongly connected to the Study Group on Regional Cooperations (action M. Grimard towards G. Reibaldi).

Climate Change and Disaster Management

The topic of remote sensing data sharing and dissemination is recognized to be of interest for Commission 5. An active support will be provided for the organization of a Conference on this topic, jointly with IISL, probably in 2014.

K. Suzuki made the comment that the efforts for the Summits preparation shall be focused on the important topics, and the “Offsetting of technologies” shall not get a first priority.

Again there shall be a strong connection between the Disaster Management topics and Study Group on Regional Cooperations (e.g. Sentinel Asia cooperation).

6. AOB

Chairman M. Grimard reminded that the term of the mandate of the present membership will end at next meeting in Beijing, where he will himself handover the chairmanship to C. Jorgensen.

He gave his appreciation of the work performed by the Commission 5 during this 2011-2013 terms. All the members of the Commission contributed very effectively, in a very open-minded and constructive spirit. The interactivity was pretty good between the physical meetings, and all members were responding to the demands. This has allowed in particular to review and support the completion of one study, and to implement two new studies.

He reminded that the rule of the Academy is that a turn-over of 30% shall be respected for the next Membership : it means that in addition to the past-Chair S. Camacho who is leaving automatically, two other members will not stay for the next term. As the contribution of all present members has been of great value, M. Grimard expressed the wish that these two members will continue to support Commission 5 activities as “associated fellows”.

The next Commission 5 meeting will take place during the Academy Day at the 64th IAC to be held on 22 September 2013 in Beijing.

The meeting adjourned.