

International Academy of Astronautics

Commission V – Meeting Report

Adelaide (Australia)

23 September 2017

Attendance:

Bernhard Schmidt-Tedd (Chair), Gabriella Arrigo (Secretary) Isabelle Duvaux-Bechon (vice-Chair and former Secretary), Marius-Ian Piso, Christophe Bonnal, Neagu Oana, Mathias Spude, Michael Hawes, Marc Haese, Peter Stubbe.

1. WELCOME

The new Chair of the Commission, Bernhard Schmidt-Tedd, welcomed the participants.

2. ADOPTION OF THE AGENDA

The agenda was adopted.

3. ADOPTION OF THE MINUTES OF THE LAST COMMISSION 5 MEETING, PARIS (20 MARCH 2017)

The minutes of the last Commission meeting in Paris were adopted.

4. IAA COSMIC STUDIES

4.1 CURRENT STUDIES

The Chair presented the status of the studies.

4.1.1 Study Group 5.10 - Orbital Debris Removal: Policy, Legal, Political and Economic Considerations

The status of the study was reported in writing

4.1.2 Study Group 5.12 - Dynamics of Space Exploration Strategies and Future Outlook

No progress to be reported

4.1.3 Study Group 5.13 - Space Systems as Critical Infrastructure

The study is almost finalized, nearly ready for final review by Commission 5. Marius-Ioan Piso will present the study during the Academy Day

4.1.4 Study Group 5.14 - Situation Report on Space Debris 2016

The study is published and available on line

4.1.5 Study Group 5.15 - Space Traffic Management – Towards a Roadmap for Implementation

It is in the final publication process. Christina Giannopapa will present the study during the Academy Day.

4.1.6 Study Group 5.16 - International Legal and Policy Regimes for Space Natural Resources Exploitation and Utilization (SREU)

No report was provided.

4.1.7 Study Group 5.17 – Space Debris Situation Report - 2019

It is starting. Actions on-going to renew the membership while ensuring some continuity. First draft planned in March 2018. It can be linked to both Commissions 3 and 5. Michael Hawes and Mathias Spude are interested to take part.

Darren S. McKnight will present the study during the Academy Day.

4.2 NEW STUDIES PROPOSALS

Dr, Zvi Kaplan proposed a new study on “Access to Space Needs and Capabilities in the Foreseeable Future”. Short Description of Scope of Study: *the "Access to space" is viewed as a critical discipline which is mandatory for the future growth of the use of the outer space in the service of mankind. Following nearly 70 years since the humanity succeeded to set up objects which occupying our planet at various distances, while feeling for different missions in our solar system and even beyond.*

Indeed, the implantation of space technologies and the operation of space systems have vastly contributed to our well-being, to our economic growth, to feeling security demands and in addition, one cannot ignore their importance to deepening our scientific understanding of new phenomena and the revelation of the cosmic secrets. The speedup of the space's adventure is even seen extremely significant for the enrichment of our liveliness and of its criticality to our existence in the hereafter.

It has still to be validated by Commission 5.

5. IAA CONFERENCES

5.1 CURRENT IAA CONFERENCES

5.1.1 6th IAA Conference on Space Systems as Critical Infrastructure

3-4 August 2017, Mamaia, Romania

Marius-loan Piso reported on this conference. There were 35 participants from 5 countries. Discussions were held on the evolution of the study groups. Sessions were devoted to disruptive space, new methods to contribute to the stability of space systems, orbit removal issue... A presentation is planned for the UN.

The conferences fed the report 5.13 and vice versa.

The 7th conference is planned in August 2018 in Mamaia.

5.1.2 IAA Symposia at IAC

30th IAA symposium on space policy regulation and economics,
Adelaide, Australia (IAC E3)

B. Schmidt-Tedd reported.

There was a good number of papers. Sessions for next year include international cooperation, private endeavors, space economy, safe and secure environment, strategic risk management + the IAA/IISL session on Planetary Defense

15th IAA symposium on space debris, Adelaide, Australia (IAC A6)

C. Bonnal reported – good success as usual

He will not continue the joint session with the Small Satellites as least in 2018.

Will be seen for 2019. Small satellites related items are included in session A6-4 anyway.

32nd IAA/IISL scientific legal round table, Adelaide, Australia (IAC E7.6)

Chair: F. Von Der Dunk

There were 4 speakers on technological and legal implications of in-orbit servicing.
There is a change of the Chair for 2018.

5.2 NEW CONFERENCES PROPOSALS

None

6. REPORT FROM THE IAA PERMANENT COMMITTEES

6.1 COMMITTEE ON SPACE DEBRIS

IAA Permanent Committee on Space Debris

Chair: C. Bonnal, Co-Chair: H. Klinkrad,

Secretary: Liou Jer-Chyi

The meeting of the Committee was held in the morning and attended by 35 people.

6.2 COMMITTEE ON IAA/IISL Scientific Legal Liaison

IAA/IISL Scientific-Legal Liaison Permanent Committee

Co-Chairs: von der Dunk Frans / Sandau Rainer

Co-Secretaries: Haese Marc / Rohner-Willsch Nicola

There was very few attendance as it was held during the Moot Court – see if possible to change date in the future.

7. IAA HEADS OF SPACE AGENCIES SUMMIT

No report

8. OTHER BUSINESS

The reorganisation of the functioning of the Academy was presented. In particular, the fact that Commission members are not any more limited to 10, but can include all those interested and wishing to participate. IAA Secretariat or Commission Bureau have the right to propose a change in the membership for those not active. Non Academicians (full or associate members) can be accepted as guests, however their participation can be limited. The Commission discussed how to expand the number of its members (currently limited to the new Bureau with the new rules). It was proposed that the attendees might be potential members if they so wish, even if they are not yet IAA members (as guests in that case).

9. ADJOURN

Next Commission 5 meeting will be in Paris in March 2018 (Spring Meeting)
A Teleconference will be arranged in December 2017 according to the new rules of IAA for Commissions.