

# International Academy of Astronautics

## Commission V Report on Meeting

Paris, France

20 March 2017

### Attendance:

Bernhard Schmidt-Tedd (Co-Chair), Isabelle Duvaux-Bechon (Secretary), Christophe Bonnal, Zvi Kaplan, Marius-Ioan Piso, Nicola Rohner-Willsh, Lesley-Jane Smith

Via Skype: Corinne Jorgenson (Past Chair), Michel Garrett, Michael Hawes, Raul Joya, Jacques Masson.

#### 1. WELCOME

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

#### 2. ADOPTION OF THE AGENDA

The agenda was adopted.

#### 3. ADOPTION OF THE MINUTES OF COMMISSION 5, GUADALAJARA SEPTEMBER 2016 MEETING

The minutes of the Guadalajara September 2016 meeting were adopted.

#### 4. IAA COSMIC STUDIES

##### 4.1 CURRENT STUDIES

Bernhard Schmidt-Tedd presented the status of the studies.

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

The first draft is planned for the Summer 2017 as there are now new perspectives implying short-term binding necessity (only long-term was considered before). This changes the economics and the viability of the proposals and implies cross reference with previous reports. The chapter 4 on Legal issues needs a lot of rewriting. Question on the responsibility for non-maneuverable satellites.

##### 4.1.2 Study Group 5.11 - Global assessment of regional cooperation in space: policies, governance & legal tools

Study published.

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

No progress to be reported.

#### **4.1.4 Study Group 5.13 - Space Systems as Critical Infrastructure**

Marius-Ioan Piso presented the status of the study. The final draft is ready to be sent to the Commission and it is planned that the study be finalized before August 2017. Five conferences were organized in that frame. It will be updated “permanently”.

#### **4.1.5 Study Group 5.14 - Situation Report on Space Debris**

Christophe Bonnal presented the status of the study. It has been through the peer review and 15 peer reviewers have sent numerous comments. They were integrated and circulated among Space Debris Committee members, to be finalised on the next day before being passed to Commission 5 for final validation. It is now called “Space Debris Situation Report 2016”.

As agreed before, it will be freely downloadable from the IAA web site and CNES will provide paper copies that can be sold by IAA.

#### **4.1.6 Study Group 5.15 - Space Traffic Management – Towards a Roadmap for Implementation**

The final version was circulated to the Commission for final approval before being submitted to SAC and BOT.

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

No progress reported. Study 3.26 (Space Mineral Resources #2) to be contacted.

### **4.2 NEW STUDIES PROPOSALS**

Christophe Bonnal: Space Debris Situation Report 2019: new elements have emerged that lead to the need of a new study, in particular the mega constellations. This will be a follow-up study (if agreed) from 5.14 with the members from this study plus new members from countries not yet represented.

Marius-Ioan Piso: concerning Impact Deflection Assessment (NASA DART mission and ESA AIM), nothing has been seen on the liability of such impact mission. He will prepare a draft for this proposed study.

Serge Plattard to be contacted to see whether he would still plan a study on Security issues of space activities as proposed in Guadalajara.

## **5. IAA CONFERENCES**

### **5.1 CURRENT IAA CONFERENCES**

**5.1.1 6<sup>th</sup> IAA Conference on Space Systems as Critical Infrastructure - 3-4 August 2017, Mamaia, Romania**  
Marius-Ioan Piso reported on it.

#### **5.1.2 IAA Symposia at IAC**

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

Bernhard Schmidt-Tedd reported that there was a good number of proposed papers (only noting a reduction of papers proposed for session E3.3 from 35 in 2016 to 14 in 2017). 15 papers will be accepted by session, implying 3 no-shows are acceptable. The same structure will be kept for 2018, and UNISPACE+50 will be reflected.

15<sup>th</sup> IAA symposium on space debris, Adelaide, Australia (IAC A6)

Christophe Bonnal presented the status of the symposium with 10 sessions and a very high number of abstracts proposed. There will be 2 joint sessions with the Space Security Committee and the Small Satellites.

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

Nicola Rohner-Willsch presented the status of preparation of the round table which is in a good shape. Topics for 2018 are under discussion.

#### **5.2 NEW CONFERENCES PROPOSALS**

Corinne Jorgenson asked whether it would be interesting to propose something for UNISPACE+50 or have a Commission meeting at this occasion.

- Meetings with IGOs and industry on 18-19 June
- Official meeting 20-21 June

Those having ideas should contact Bernhard Schmitt-Tedd.

The 1<sup>st</sup> IAA conference on Space Situational Awareness will be held in Orlando (USA) on 13-15 November 2017. It is not organized by Commission 5 but can be of interest to its members.

#### **6. REPORT FROM THE IAA PERMANENT COMMITTEES**

##### **6.1 IAA PERMANENT COMMITTEE ON SPACE DEBRIS**

Christophe Bonnal presented the work of the Committee. Space Debris is the #1 in average attendance at IAC. All statistics were presented.

##### **6.2 IAA/IISL SCIENTIFIC LEGAL LIAISON PERMANENT COMMITTEE**

Nicola Rohner-Willsch presented the work of the Committee.

#### **7. IAA HEADS OF SPACE AGENCIES SUMMIT**

Corinne Jorgenson recalled the past meeting in September 2015 in Mexico on Climate Change and Disaster Management, with a 2 pages declaration. This was presented to the COP21 in Paris.

The next one will be on Space Exploration.

There has been a successful conference in Korolev City (Russia), available on video.

## **8. OTHER BUSINESS**

Information from the plenary Commission meeting on the coming rules for commissions was provided to the participants. These rules have already been presented in Guadalajara and will enter into force in September for the renewal of the Commissions' membership:

- Improve the pro-activeness of a Commission, have active participants
- Do not restrict anymore the number of members of a Commission (10 today) but keep only active members (composition can change anytime)
- Avoid that nothing happens between the Spring and IAC meetings, with as well many of the members of a Commission that cannot attend at least one of the two meetings, thus install former teleconferences in between to have members participating, e.g. in the timeframe December-January and May-June