

International Academy of Astronautics

Commission V Report on Meeting

**Paris, France
March 20, 2007**

1/ Attendance

Gerard Brachet, Chairman
Kai-Uwe Schrogl, Vice-Chairman

Participants: Jean-Jacques Favier, Corinne Jorgenson, Mathias Spude, Serge Plattard, Sridhara Murthi, Kazuto Suzuki, Janusz Zielinski and Pierre Molette.

Gerard Brachet, Chair of Commission V, opened the meeting and asked the participants to introduce themselves. The Commission V Secretary, Debra Facktor Lepore, could not attend the meeting, and Corinne Jorgenson has been asked and agreed to assume the Secretary role for this meeting.

2/ Short review of the agenda

The agenda, which had been distributed before the meeting was adopted.

3/ Updated definition on the scope of Commission V

The new scope of Commission V has been reviewed and submitted to the IAA Secretariat. It reads the following: "Policy, Institutional and Social Issues – International Cooperation, Competition and Security – Space Law, Scientific-Legal Liaison – Economic Issues, Management and Financing – Commercialization and Privatization Issues – Space Debris."

The title of Commission V is "Space Policy, Law and Economics." Kai-Uwe Schrogl suggested changing the term "Law" by a word more appropriate to the Commission, arguing that space law issues are dealt within the International Institute of Space Law. Corinne Jorgenson suggested the word "Regulations." This term got approval and Gerard Brachet will propose this change at the next IAA meeting.

4/ Review of report of last Commission V meeting held in Valencia

No comments were made on the meeting minutes.

5/ Planning for IAC 2007 in Hyderabad

The Symposium E3 titled "Space Benefits for Mankind: Policy and Economic Aspects" is coordinated by Gerard Brachet and Kai-Uwe Schrogl. Gerard Brachet mentioned there were no papers submitted from China.

Session E3.1– Socio Economic Benefits of Space Activities for Developing Countries
(14 papers)

Co-Chairs: M.Y.S. Prasad and Harijono Djojodihardjo

Rapporteur: Claire Jolly

Session E3.2– Space Systems Benefits for Global Security (11 papers)

Co-Chairs: Doug Aldworth and Dr. V.S. Hedge

Rapporteur: Mahulena Hofmann

Session E3.3– Economic and Cultural Benefits of Space Systems (8 papers)

Co-Chairs: Kazuto Suzuki and Alice Lee

Rapporteur: Nicolas Peter

Session E3.4– Exploration and Discovery (8 papers)

Co-Chairs: Toshifumi Mukai and Serge Plattard

Rapporteur: Mathias Spude

Session E3.5– Scientific-Legal Roundtable “Google Earth et al–Pros and Cons of an Easier Access to Satellite Imagery” (Invited papers only)

Co-Chairs: Wendell Mendell and Frans Von Der Dunk

Rapporteur: Nicola Rohner

- There will be an IAA/IISL Plenary Event “The United Nations and Space: Looking forward to the second half century of space activities,” at the occasion of the 50th anniversary of the space age and the treaty’s 40th anniversary. Kai-Uwe Schrogl is in charge of the coordination with IISL.

6/ Selection of the main theme of Symposium E3 at the IAC 2008 in Glasgow

No theme has been approved yet and the discussion remains open. Gerard and Kai-Uwe will propose a theme for Symposium E3 in time for the April 15 deadline.

7/ New Study Group Proposals

- Protecting the Environment of Celestial Bodies (see attachment)

An initial proposal to establish a Study Group on environment protection of the Moon has evolved to look at the issue of celestial bodies and not just limiting to the Moon or Mars. The proposal to establish a Study Group on “Protecting the Environment of Celestial Bodies” has been prepared, accepted by Commission V and approved by the SAC. Kai-Uwe Schrogl took the initiative to contact some colleagues in Germany and the leadership team is constituted of Mahulena Hofmann (Chair), Petra Rettberg (Co-Chair) and Marc Haese (Rapporteur). A first draft is expected in 2008, a second one in 2009 and the final study in 2010.

- Launcher Policy

The proposal for a Study Group on “Launch Policies: Perspectives for the 21st Century” is a work-in-progress. Corinne Jorgenson (Chair), Henry Hertzfeld (Co-Chair) and Mathias Spude (Rapporteur) are finalizing the scope of the study and in the process of identifying contributors. Sridhara Murthi and Kasato Suzuki will help finding contributors respectively

form India and Japan. The proposal will be considered for approval at the next meeting in Hyderabad.

- Private Manned Sub-Orbital Flights

Christophe Bonnal, from Commission III, presented the proposal for a study on “Private Manned Access to Space.” Commission V would contribute to the policy, regulatory and economic (insurance) aspects of commercial manned sub-orbital flights (sometimes associated with Space Tourism). The co-chairs will be from Commissions III and V.

- Policy Implications of Earth Protection against NEOs

There has been no formal study proposal and no news yet about the on-going cosmic study group on NEO’s under Commission I.

- Space and Global Security

The idea of establishing such a study group under Commission V was already addressed in Fukuoka in 2005 and the decision was taken to wait for the session dedicated to this topic in Symposium E3 in Valencia. A specific meeting of Commission V members who were interested in this issue took place on Thursday October 5, 2006 after session E3.4 and was not conclusive. Participants in the meeting of Commission V debated if any action should be taken. There was general agreement that the topic of Global Security is too wide and not sufficiently well defined. Sridhara Murthi suggested focusing on security of space systems and space operations. A discussion followed, which led to the conclusion that indeed a more focused topic might be of interest. Gerard will continue investigating this idea before the Commission V meeting in Hyderabad. Contributions to this debate from the IAA Commission V members are welcome.

- Benefits of Space Activities

A study had been suggested based on an initial proposal by Mukund Rao in 2006 addressed to both Commissions V and VI on “Benefits of space activities.” Gerard Brachet mentioned that a lengthy discussion during the joint session of Commissions V and VI in Valencia concluded that the initial proposal was covering such a wide subject that it would run the risk of not being able to produce a report in a reasonable time.

Gerard Brachet informed the participants that, in his capacity of COPUOS chairman, he is proposing that, in the future, UNCOUOS addresses requests to the IAA (or to COSPAR, or to other NGOs in the space area) to look at certain topics of interest to COPUOS delegations. Academy Cosmic Studies can be initiated either by Commission members or by “outside” organizations such as UNCOUOS.

8/ Participation by Commission V representatives to study groups initiated by other IAA Commissions, COSPAR or IAF Technical Committees

No information to report here.

9/ Report from Commission V correspondent for Acta Astronautica

IAA space policy papers are published in the Space Policy journal and no longer in Acta Astronautica. Kai-Uwe Schrogl reported that the Space Debris and the Space Traffic Management Cosmic Studies will be published in Acta Astronautica.

10/ Report from Commission V representative for the “Space Policy” Journal

Kai-Uwe Schrogl reported that coordination with the Space Policy Journal functions very well. Papers from our Symposia are regularly reprinted there. The editor is very much aware of our activities and actively seeks to find contributions resulting from our symposia. At this stage no further initiatives have to be taken with regard to greater consideration in this respect.

11/ Plans for the celebration of the 50th anniversary of the Space Age

There is a joint UNCOPUOS-IAF event to celebrate the 50th anniversary at UNESCO Headquarters in Paris on 21 March 2007 at 17:00. Participants to the Commission V meeting are welcome.

12/ Commission Membership Renewal

This year, the members of Commission V are up for renewal. Each member will have to decide if he/she would like to stay as official member or not, and communicate the decision to the Chairman, Gerard Brachet. On this matter, Gerard plans to send a specific message to each member individually in the coming months.

Each Commission of the Academy has ten official members that are empowered to decide proposals that are forwarded to the IAA Scientific Activity Committee (SAC) for discussion or arbitration. Then the SAC presents the results to the Board of Trustees for endorsement. This process is working successfully as exemplified by the acceleration in study production (12 studies during the last 3 years).

Each commission conducts twice a year open meetings in order to get fresh ideas, so it does not work in a vacuum and anybody is welcome to attend.

13/ Date of next meeting

The next Commission V meeting will be held in Hyderabad, India, on September 23, 2007.

Please check the IAA website, “News and Calendar” for information and updates at: <http://iaaweb.org/content/view/171/287/>

Being no other business, the meeting adjourned.

ATTACHEMENT

Proposal for Forming an IAA Study Group

Title of Study: **Protecting the Environment of Celestial Bodies – PECB**

Proposer(s): Prof. Dr. Mahulena Hofmann (CZ / D)
 Justus-Liebig-University Giessen
 Licher Straße 76
 35394 Giessen, Germany

Primary IAA Commission Preference: Commission 5
Secondary IAA Commission Interests: Commission 2

Members of Study Team

Chairs:

Prof. Dr. Mahulena Hofmann (CZ / D)
Dr. Petra Rettberg (D)

Secretary:

Marc Haese (D)

Other Members:

Philippe Achilleas (F) (tbc)
Andre Debus (F)
Rosalind A. Grymes (US)
Gerhard Kminek (D)
John Rummel (US)
Annelie Schoenmaker (NL)
Kazuto Suzuki (JP)
Mark Williamson (UK)
Vasilis Zervos (GR)
... others ...

Short Description of Scope of Study

Overall Goal:

In the context of increased exploration activities within the Solar System, the study will analyse the effects and threats which those activities pose to celestial bodies and will propose overall guidelines and possible means of regulation for future activities. The Study will be carried out in six steps:

1. Definition of the key questions related to the protection of the environment of celestial bodies.
2. Taking stock of the impact that activities of exploration, scientific research and exploitation generally may have.
3. Identifying fields of influence (such as biology, chemistry, nuclear contamination, space debris, economic exploitation, legal issues et al.) and evaluating their possible impact respectively.
4. Evaluating the influence on celestial bodies in an interdisciplinary approach, also taking into account legal, political, and economical aspects.

5. Providing proposals for rules of procedure for future activities
6. Providing recommendations for possible regulatory measures.

Intermediate Goals:

The contents of the Study will be developed in subsequent steps, which build upon each other. Therefore, the Intermediate Goals consist of the first three Overall Goals:

1. Definition of the key questions related to the protection of the environment of celestial bodies.
2. Taking stock of the impact that activities of exploration, scientific research and exploitation generally may have.
3. Identifying fields of influence (such as biology, chemistry, nuclear contamination, space debris, economic exploitation, legal issues et al.) and evaluating their possible impact respectively.

Methodology:

The study will be carried out in an interdisciplinary manner. Therefore it will relate to the works of COSPAR as well as other bodies and institutions such as ECSS, UN COPUOS et al.

Time Line:

October 2007 to December 2009

The Study Group intends to make use of the IAF Congresses for its work:

- IAC 2008: Discussion of the first draft
- IAC 2009: Discussion of the final draft

Final Product (Report, Publication, etc.):

Report of about 100 pages, including analysis, proposal of guidelines and possible regulatory measures.

Target Community:

- Scientific community
- Community of the intergovernmental process for the development of a 'Framework for Global Space Exploration'
- all other interested stakeholders

Support Needed:

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Potential Sponsors:

- DLR (German Aerospace Center) (tbc)
- ESPI (European Space Policy Institute) (tbc)
- COSPAR (tbc)
- others tbd