## **International Academy of Astronautics**

# Commission 5 Report on Meeting

## Paris, France Tuesday 17 March 2009

#### 1/ Attendance

Kai-Uwe Schrogl, Chairman

Mathias Spude, Ray Williamson, Nicolas Peter, Gerard Brachet, Kazuto Suzuki, Nicola Rohner-Willsch, Werner Balogh, Pierre Molette, K.R. Sridhara Murthi, Max Grimard, Claire Jolly, Christophe Bonnal and Corinne Jorgenson

#### 2/ Short review of the agenda

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

### 3/ Review of IAC 2008 Glasgow

Gerard Brachet mentioned there was a high number of "no-shows", higher than at the IAC Hyderabad, which is surprising for a Congress in Europe. Most of the authors did not inform the chairs whether they were attending or not. Kazuto Suzuki suggested keeping a special list of authors who do not present their paper, so Commission V can keep track if there are repeat behaviors. Indeed, the no-shows take away opportunities from other authors that could attend. This fact needs to be taken into account in the paper selection process.

Also, all Symposium chairs should e-mail their authors in advance to check if they still plan to attend the Congress. It is the role of the Symposium chairs to communicate ahead of time with their authors, and communicate with the Commission V chairs—who are the Symposium coordinators—as soon as issues arise.

It was noted that there was some minor overlap with the public/private partnership session. This was not surprising, as there has been incredible large rise in the number of sessions at IACs over the past few years. Gerard Brachet mentioned there were 100 sessions in Valencia, Spain (2006) and 140 sessions in Glasgow, UK (2008); this is an additional 40 sessions in 2 years! Undeniably, this leads to overlap issues within the Congress. The IAA Commission V symposium is somewhat less affected as its focus is on policy and is the only symposium that addresses this topic.

## 4/ Status of Symposium E3 at IAC 2009 Daejeon

The Symposium E3 is coordinated by Kai-Uwe Schrogl and Sergio Camacho:

Session E3.1–New Developments in National Space Policies and Programs Monday 12 October at 3pm, Room "Technical Session #3"

Session E3.2–Space policies and programs of international organizations with particular regard to the participation of developing countries Tuesday 13 October at 10am, Room "Technical Session #3"

Session E3.3–Launcher Policies and Regulations Wednesday 14 October at 10am, Room "Technical Session #3"

Session E3.4–International policy and economic aspects of space applications Wednesday 14 October at 3pm, Room "Technical Session #3"

Session E3.5–24<sup>th</sup> IAA/IISL Scientific-Legal Roundtable on Assessing Commercial Human Spaceflight (Invited Papers only)
Thursday 15 October at 10am, Room "Technical Session #3"

#### 5/ Planning for IAC 2010 in Prague

In 2010, it will be the 23<sup>rd</sup> IAA Symposium on Space Policy, Regulations and Economics (Symposium E3):

This symposium, organized by the International Academy of Astronautics, will provide a systematic overview of the current trends in space policy, regulation and economics by covering national as well as multilateral space policies and plans. In addition its focuses on two specific issues: Space Weather and Planetary Protection, which is currently being researched under an IAA Cosmic Study project. The symposium also integrates findings of the IAA/IISL Scientific-Legal Roundtable, which deals with an inter-disciplinary assessment of small satellite missions.

#### Coordinators:

Kai-Uwe Schrogl, ESPI (European Space Policy Institute) Austria, <u>kai-uwe.schrogl@espi.or.at</u>

Sergio Camacho, CRECTEALC (Regional Centre for Space Science and Technology Education for Latin America and the Caribbean) Mexico, <a href="mailto:sergio.camacho@inaoep.mx">sergio.camacho@inaoep.mx</a>

#### E3.1 New developments in national and international space policies and programs

This session will provide a forum for presenting current space policies and programs of space-faring countries. It will also provide a forum for presenting current space policies and programs of international organizations with space activities.

Chairs: Kazuto Suzuki, Hokkaido University, Japan, <u>kazutosuzuki@jcom.home.ne.jp</u> Jan Kolar, CSO, Czech Republic, <u>jan.kolar@czechspace@cz</u>
Rapporteur: Catherine Doldirina, McGill University, Canada, <u>kdoldyrina@yahoo.com</u>

#### E3.2 Policy and economic aspects of space weather

Space weather slowly emerges as a policy item. While it has long been only a scientific question, its economic relevance is steadily growing due to its effects on commercial space activities in particular in the field of telecommunications. In addition, space weather is expected to become an element of new Space Situational Awareness projects so that international coordination should be foreseen. This session reflects on such questions of impact and coordination.

Chairs: Werner Balogh, UNOOSA, Austria, <a href="werner.balogh@unoosa.org">werner.balogh@unoosa.org</a>
Dave Kendall, CSA, Canada, <a href="dave.kendall@space.gc.ca">dave.kendall@space.gc.ca</a>
Rapporteur: Wolfgang Rathgeber, DLR, Germany, <a href="wolfgang.rathgeber@dlr.de">wolfgang.rathgeber@dlr.de</a>

#### Session E3.3: The Space Economy in Figures

For policy-makers, the 'space economy' has become an interesting concept covering not only the economic dimensions of the space sector, but also of its applications. What is the economic size of the international space sector? What are the socio-economic impacts of space applications? This session aims to present the state of the art in measuring the space economy. In addition to selected papers, it will include a number of invited papers by experts.

Chairmen: Pierre-Alain Schieb, OECD Pierre-Lionnet, Eurospace

Rapporteur: TBD

#### E3.4 Protecting the Environment of celestial Bodies

This session will have at its centre the presentation of the finalized IAA Cosmic Study on that topic. Further views from the scientific as well as policy and regulative perspective are invited to bring this issue forward and to the attention of decision-makers.

Chairs: Mahulena Hofmann, University of Giessen, Germany,

Mahulena. Hofmann@recht.uni-giessen.de

Petra Rettberg, DLR, Germany, <a href="mailto:petra.rettberg@dlr.de">petra.rettberg@dlr.de</a>

Rapporteur: Marc Haese, ESA-ESTEC, The Netherlands, marc.haese@esa.int

## E3.5 24th IAA/IISL Scientific-Legal Roundtable: The new age of small satellite missions (Invited Papers only)

With small satellite missions on the rise, this session will look into the issue from the policy, economic and regulatory perspectives in order to shape a comprehensive picture of the state and the prospects of this area. The Roundtable, organized by the IAA/IISL Scientific-Legal Liaison Committee, will comprise invited papers by the leading experts only and is aimed at conducting an inter-disciplinary debate. It will be opened by the Presidents of IAA and IISL stressing the outstanding character of this event.

Chairs: Rainer Sandau, DLR, Germany, <u>rainer.sandau@dlr.de</u>

Leslie-Jane Smith, United Kingdom, ljsmith@barkhof.uni-bremen.de

Rapporteur: Nicola Rohner-Willsch, DLR, Germany, nicola.rohner@dlr.de

In addition, Commission V is proposing a plenary on "Protecting the Space Environment."

## 6/ Status of Study Group Activities

- IAA Space Debris Environment Remediation

Proposal received in July 2007.

Current status is "3 SAC Approved"

Final membership list with addresses and email is urgently requested in view of IAA formal appointments.

- IAA Protecting the Environment of Celestial Bodies (PECB)

Proposal received in March 2007.

Current status is "SAC Approved"

Final membership list with addresses and email is urgently requested in view of IAA formal appointments.

- IAA Launch Regulations and Policies: Perspectives for the 21st Century

Proposal received in November 2006.

Current status is "SAC Approved"

Final membership list with addresses and email is urgently requested in view of IAA formal appointments.

- IAA Space Systems as Critical Infrastructure

Proposal received in June 2008.

Current status is "Proposal Received"

Proposal to be approved by the Commission 5 on 17 March 2009

Final membership list with addresses and email is requested in view of IAA formal appointments.

#### 7/ Acta Astronautica

Kai-Uwe Schrogl reported that a good number of papers have been submitted. He also encouraged members to prepare articles as Acta Astronautica is not limited to IAC papers.

## 8/ Date of next meeting

The next Commission V meeting will be held during the Academy Day, in Daejeon, Korea on Sunday October 11<sup>th</sup> 2009–8h30-12h00. Please check the IAA website, "News and Calendar" for information and updates at: <a href="http://iaaweb.org/content/view/171/287/">http://iaaweb.org/content/view/171/287/</a>

Being no other business the meeting adjourned.