

## **Summary minutes of IAA Commission V meeting, Paris, 8 to 11 am, 22 March 2005**

Participants:

John Logsdon, Chairman

Gerard Brachet, Vice-Chair

Graham Gibbs, Canadian Space Agency representative in Washington

Kai-Uwe Schrogl, leader of Commission V Study Group "Space Traffic Management"

Christophe Bonnal, co-leader of Commission V study Group "Space Debris Mitigation Guidelines"

François Becker, leader of Study Group "Space to Promote Peace (with focus on reconstruction of Afghanistan)"

Claudio Maccone

Some members of Commission VI joined the discussion towards the end of the meeting (see last point in section 4 below).

1/ Minutes of Commission V meeting in Vancouver, 3 October 2004:

In the absence of written minutes, John summarized the main points from the meeting held on Oct 3, 2004; most of them will be covered in today's agenda and updated.

2/ Programme for Fukuoka: the symposium organized by Commission V ("Space Exploration: Policy, Legal and Economic issues") seems to be in good shape. Gerard and Patrick Eymar will participate in the IPC meeting during the next two days to finalize the selection of papers for the symposium.

According to Dick Kline, the plenary event suggested by Commission V ("Space systems dedicated to protecting our planet and its inhabitants") has a good probability of being accepted, even though another plenary event on a related subject was proposed by the IAF's CLIODN. Gerard had proposed to integrate the issue addressed in the CLIODN proposal, which is focussed on discussing a possible international agency for space based support for disaster management, into the wider issues addressed by the panel of high level persons invited for the plenary event as proposed by Commission V. Gerard will be in contact with Mukund Rao to implement this idea. (Note: The next day, the IPC confirmed that the plenary event proposed by IAA Commission V was selected. The text of Commission V proposal is appended to this report).

3/ Commission composition, vice chairs, etc. :

Dick Kline explained that the Commission has the lead in such matters. The rule is that the Chair and Vice - Chair have to be members of the IAA, and the secretary has to be at least a corresponding member. (John and Gerard addressed the question of the next vice-chair with the Dr Kasturirangan and Dick Kline in an informal discussion later after the Scientific Activities Committee meeting.)

4/ Status of on-going Commission V Study Groups and discussion of possible new Study Groups:

- Kai-Uwe Shrogl presented the status of the Study Group on Space Traffic Management. The final report will be available at the end of April, which will allow the formal peer review process to take place in the May-July time frame, and present the report for approval by the IAA in time for the October meeting in Fukuoka. Kai-Uwe was invited to suggest names of peer reviewers to participate in the review process. Dick Kline mentioned that each of the Academy' sections is supposed to designate a reviewer.
- In the absence of Walter Flury, leader of the Space Debris Study Group, Christophe Bonnal informed Commission V members that he has drafted an introduction and an executive summary of the whole report, which is made of two separate sections, one on spacecraft-generated debris and the other on launch vehicles-generated debris. The members of the Study Group are being invited to approve this introductory/executive summary section, which should take place before mid-April, at which time Christophe will formally submit the report to Commission V for review. Here also, the review process should take place in the June-July time frame, and the report be ready for formal approval by the IAA in time for next October IAC congress. Gerard mentioned that the recent progress made on discussion on debris in the UN-COPUOS Scientific and Technical Sub-Committee makes it important that this report be published during the course of this year.
- Proposals for new Study Groups: A formal proposal had been prepared by Claudio Maccone on protection of the Moon's electromagnetic environment. Claudio provided some information background on this proposal and confirmed that it was very much motivated by SETI objectives. It was agreed that Commission V will look at it and reflect on how to go forward. In particular, liaison with Commission I needs to be established, and possibly with COSPAR which has been very active in planetary protection for a long time. Other aspects of environment protection of the Moon would need to be addressed.
- Gerard mentioned that he had been thinking about a possible Study Group on Earth Observation issues in the context of GEOSS, and preliminary discussion on this idea had taken place in Vancouver. However, following the Earth Observation Summit that took place in Brussels on February 16, he has discussed the idea with colleagues who were deeply involved in the drafting and elaboration of the GEOSS 10 year implementation plan, and it is not clear what value the IAA could bring to the GEOSS discussions. Graham mentioned that possibly IAA could focus on the problem of transitioning from experimental to operational satellite systems, which is indeed a major difficulty. Gerard confirmed this could be a good area for an IAA Study Report, and will discuss it with the GEO permanent secretariat which is currently being implemented in Geneva, hosted by WMO.
- John put forward the idea of a Study Group on the impact of defence and security space activities on civilian space activities. As the IAA has historically been reluctant to address military aspects of space, this would require a policy decision by the SAC and the Board of Trustees of IAA. The issue will be addressed at the SAC meeting later the same day. Also, Kai-Uwe stressed that there is always a risk in such matters to see the study group become politicised and the report seen as a

criticism of some nations which could create problems for the IAA. He recommends caution in such areas.

- Another idea which was suggested but not discussed in depth is a study of launcher policy and launch services rules and regulations (Kai-Uwe Schrogl).
- David Raitt, Cathy Swan and Richard Clar, all members of Commission VI, who joined the Commission V meeting, mentioned the wish of Commission VI to see participation from Commission V on the second part of their on-going study "Impact of Space on Society", and also on "Space Tourism". On the first point, this was agreed (Gerard had participated in last week's symposium on Impact of Space on Society organised by Commission VI in Budapest). On the second point, it was agreed that Commission V would try to include a session on Space Tourism into its proposed symposium for the IAC congress in Valencia in October 2006 (Such a session was included in the final version of the symposium "Which Direction for Space?" that Commission V formally proposed during the IPC meeting for the Valencia Congress).

5/ The next meeting of Commission V is planned during the Academy day in Fukuoka, Japan, planned for October 16, 2005.

## **APPENDIX**

### **FUKUOKA CONGRESS PROPOSAL FOR IAA PLENARY EVENT**

**Title: "Space Systems Dedicated to Protecting Our Planet and Its Inhabitants"**

#### **Description of the event and relevance to IAA activities:**

The catastrophic events of December 26, 2004 in South Asia remind us that we are all inhabitants of a living planet, characterized both by sudden natural disasters and a fragile environment which we must preserve for future generations. From a cosmic perspective, we are indeed three billions "geonauts" aboard this unique and fragile "space station Earth," travelling through the universe. Our generation wants our sons and daughters, and their sons and daughters, to find that we have transmitted to them a viable vessel to live on.

Space systems devoted to understanding and monitoring humanity's impact on the environment of planet Earth have already contributed significantly to understanding of the mechanisms affecting the atmosphere, the oceans and the biosphere, and even the Earth's interior via magnetic field and gravity anomalies measurements. Daily, weather observation satellite systems play a large role, together with

Earth-bound measuring networks, in monitoring and forecasting the short-term behaviour of the atmosphere.

In 2003, a Ministerial summit took place in Washington, to initiate a new approach to global space-based Earth observation. That initiative was called GEOSS (Global Earth Observation System of Systems). Its purpose was to encourage a better integration and international coordination of space-based observation strategies and systems. This summit was followed by another Ministerial level meeting in Tokyo in 2004. The GEOSS approval process will conclude by a final summit meeting in Brussels on February 16, 2005, when a ten year implementation plan will be adopted.

IAA Commission V proposes that this GEOSS initiative and its plans for implementing a “systems of systems” of Earth observation and monitoring as well as its relevance to prevention and mitigation of natural disasters such as the 26 December tsunami in South Asia, be the topic of a plenary event at the 2005 International Astronautical Congress in Fukuoka.

**Format: (Dialogue, Panel Debate, Panel Discussion, etc. Audience participation should be encouraged.)**

### **Panel Discussion**

**Candidate Participants: (Should not exceed 6 panelists, and fewer is preferable. Make tentative contacts pending final approval)**

Participants to the panel would potentially be: Admiral Conrad Lautenbacher, Administrator of NOAA, who initiated the GEOSS process in 2003; Ayio Yuki, the Japanese Deputy Minister in charge of the GEOSS process in Japan; Achilleas Mitsos, the representative of the European Union, and Rob Adams from South Africa, who reflects developing country interest in the GEO concept. These four men are the co-chairs of the GEO group. Preliminary contacts with NOAA and with the European Commission indicate a positive reaction to the idea from these two organizations. Also, it is suggested that a scientist with wide experience in space observations applied to Earth science research should be asked to participate, thus bringing to the panel the point of view of the “skeptical” scientist to the discussion.

### **Integration with the rest of the IAA Activities:**

Potential topic for future study group

**Organizer (Responsible for all aspects of the Plenary Event including summary with speaker visuals prior to event.)**

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