International Academy of Astronautics 6 rue Galilée, BP 1268-16, 75766 Paris Cedex 16 Tel 331 47 23 82 15, Fax 331 47 23 82 16

IAA Commission 4 on SPACE SYSTEM OPERATION & UTILIZATION

Date: September 21^h, 2013, 13h:00- 15h:00

Venue: Beijing, CNCC room 209B

Members:

Paolo Teofilatto (Chairman)
Michael Ovchinnikov (Vice Chairman)
Tibor Balint (Secretary)
Zhu Minhui
Jordi Puig-Suari
Guests:
Chantal Cappelletti
Roland Coelho
Chiara Massimiani

AGENDA

- A. Approval of Minutes
- B. Approval of Agenda
- C. Reports of Study Groups
- D. Status of Stand Alone Conferences and Sessions for IAC
- E. Future Activities
- F. Any Other Business

MINUTES

1. Welcome and Introduction

The new Chair Prof. Paolo TEOFILATTO, and new Vice-Chair Prof. Michael OVCHINNIKOV introduced themselves to the Commission

- 2. Approval of the Report on Last Meeting The minutes of the previous meeting in Paris were approved.
- 3. Adoption of the Agenda The Agenda was approved
- 4. Reports of Study Groups Old proposal

Commission 4 is handling 4 study groups:

4.1 Study Group on Space Systems Cross-Compatibility (Proposal 4.8, Study Chair Esper and D'Errico)

The Peer review of the study group report was already performed by Commission 4 and the report submitted to SAC for the final decision.

4.2 Study Group on International Global Monitoring for Disaster Forecasting (Proposal 4.9, Study Chair Menshikov).

The report is ready for the Peer Review. The Commission 4 agrees on the following

Action: The Chairman will send the Report of the Study Group 4.9 to 2 members of the Commission 4 asking to review the report within 2 months. The reviews will be presented and the decision agreed in the next Commission 4 meeting.

4.3 Study Group on Coordination and Cooperation Program for Global Environmental Impact (Proposal 4.11, Study Chair Gu Xingfa).

A report exists and it was presented during the Congress at IGF held in Baku, November 2012. However Commission 4 did not receive the Report and it is not in condition to submit it to SAC for the publication.

The Commission 4 agrees on the following

Action: The Secretary will contact the Study Chairs urging them to send the Report to the Commission in order to start the review process.

4.4 Study group on The Applications of Microsatellitess and Cubesats to Planetary Science and Exploration Missions (Proposal 4.16, Study Chair L. Alkalai and F. Graziani)

The Commission found the subject of this study group very interesting and two Commission members (Puig-Suari and Teofilatto) like to join the study group. This group has now 22 participants and the managing issue is becoming crucial. The Commission 4 agrees on the following

Action: The Chairman will mail to the Chair Group Prof. Graziani the request of a Table of Content of the Report to be sent to Commission 4 within the end of the year, so to have a first draft for the next Paris Meeting.

New Proposal

A new study group is proposed by Prof. Filippo Graziani and Chantal Cappelletti with title:

Space Systems for Biomedical Research (proposal 4.17)

Dr. Cappelletti describes the two year project which has 16 participants and aims to propose new space systems (for instance CubeSat) to host biomedical payload The possibility of recovering the payload from space will be also investigated.

The Commission 4 approved this interesting Study group. The Commission 4 agrees on the following

Action: The Chairman will present the new study group to the Scientific Activities Committee (SAC) for the final approval. He will also contact the Study Chair in order to have a Table of Content of the Report within the present year.

5- IAA Commission Conferences

The Chairman reports that the 2nd IAA Conference on University Satellite Missions and CubeSat Workshop, held in Roma on 4-9 February 2013, had about 150 participants coming from 20 different countries.

The Proceedings of this Conference have been already printed and they are available at IAA.

Also the following Conferences, relevant for Commission 4, have been hosted by IAA:

9th IAA Symposium on Small Satellites for Earth Observation, Berlin, Germany, 22-25 April 2013

4th IAA Conference on Space Technologies: The Present and Future, Dnepropetrowsk, Ukraine, 17-19 April 2013

5th CSA-IAA Conference on Advanced Space Systems & Applications, Shanghai, China, 20-23 May 2013

The Chairman reports that the next IAA Conference on Dynamics and Control System (DYCOSS) will be in Roma 12-14 March 2014.

6- Acta Astronautica

The Chairman underlines the necessity to improve the dissemination of the results of the study groups. Although the IAA publications have a prestigious character, it is proposed to publish an extended summary of the study group researches in the IAA journal Acta Astronautica. This would have two advantages: first the reports will have the possibility to reach a wider audience and second young professionals will be even more motivated to join the Study Groups. In fact the recruitment of young professionals in the Universities follows strict and bureaucratic rules asking for publications on journals with scientific index, impact factor, citations etc., and these requirements are fulfilled by the Acta Astronautica journal.

The Commission 4 agrees on the following

Action: The Chairman will ask to the SAC to approve the publication of extended summary of the future study groups reports on Acta Astronautica.

7-Future Activities

The Chairman recall to the members and guests that the next meeting of Commission 4 Meeting will be in Paris, March 2014.

The Secretary remarks the necessity to speed up the activities of Commission 4 and to keep track of the work that must be performed by E-mail contacts and organizing teleconferences, when necessary. The Commission 4 agreed.

8- AOB

The Secretary remarks that the new schedule of the IAA Commissions is rather uncomfortable. For instance, to be present to this Commission meeting all the members had to travel on Thursday, then summing the days of the IAC Congress, this means 10 days out of work. Most of the members cannot afford this situation and it is likely that the presence at the Commission meetings is going to be reduced with respect to the past (in fact only half of the Commission

4 members are present in Beijing). Then he proposes to ask the SAC to revise the scheduling also taking into account the possibility to schedule the IAA Commission meetings during the week of the IAC.

The Commission 4 agrees on the following

Action: The Chairman will ask to the SAC commission to investigate the possibility to revise the scheduling of the IAA Commission meetings.

Paolo Teofilatto - University of Rome - paolo.teofilatto@uniroma1.it

Michael Ovchinnikov - Keldish Institute of Applied Mathematics - RAS - ovchinni@keldysh.ru

Tibor Balint - Royal College of Art - tibor.balint@network.rca.ac.uk

Zhu Minhui - Institute of Electronics, Chinese Academy of Sciences - mihzhu@mail.ie.ac.cn

Jordi Puig-Suari - California Polytechnic State University - jpuigsua@calpoly.edu

Roland Coelho - California Polytechnic State University & Tyvac Nano-Satellite Systems - rcoelho@calpoly.edu

Chantal Cappelletti - University of Brasilia; Gauss SRL - chantal.cappelletti@gmail.com

Chiara Massimiani - University of Rome , Gauss SRL - chi.massimiani@gmail.com

Date: September 21^h, 2013, 16h:00- 17h:00

Venue: Beijing, CNCC

SAC: Report of the Commission 4 Chairman to the Members

On behalf of Commission 4 the Chairman presented the new Study Group "Space System for biological researches".

The Study Group was approved by SAC.

On behalf of Commission 4 the Chairman asked to SAC to approve the publication of extended summary of the future study groups reports on Acta Astronautica.

The SAC agreed.

On behalf of Commission 4 the Chairman asked to SAC to investigate the possibility to revise the scheduling of the IAA Commission meetings. Many Chairmen of the other commissions agreed. The SAC will investigate such a possibility.