

International Academy of Astronautics

6, rue Galilée, 75116 Paris

<http://www.iaaweb.org>

Commission 4 Space System Operation & Utilization

Minutes of Meeting

23 September 2017 – 13h00-14h30

Congress center (City Room C1)

Adelaide, Australia

1. Welcome

Commission Chair

Chair Tsuchida introduced new commission leadership. And he gave a great appreciation to dear Tibor Balint for his long-term support as secretary for commission 4.

<Commission 4 membership 2017-2019> (ref: <http://iaaweb.org/content/view/718/945/>)

CHAIR	Tsuchida Akira (Japan)
VICE CHAIR	Laufer Rene (Germany)
SECRETARY	Gasbarri Paolo (Italy)
PAST CHAIR	Ovchinnikov Mikhail (Russia)

Chair Tsuchida shared information from commission plenary meeting was held right before this meeting:

1. IAA VP, Gal. Perminov requests all commissions need to pay attention of new study more.
(At that point, only he knew commission 4 has several items.)
2. At this moment, there are only commission leadership (chair, vice-chair, secretary, and past chair) are shown on the web. SAC requested each commission should make draft "member list" by end of October. Each member should have specific role to contribute commission and each member should show up face to face meeting twice per year (Paris and IAC). In addition to face to face meeting, commission member should have periodical communication via e-mail, Skype, etc.
3. SAC presentation format will be standardized from March 2018.

Regarding to new commission 4 member list, commission 4 leadership decided to start drafting this by due date.

2. Commission composition and Adoption of the Agenda

Commission Chair

Chair Tsuchida worked through planed agenda.

3. Adoption of the Minutes of Commission 4, Paris March 2017 meeting

Commission Chair

Chair stated because most of participants joined at Spring meeting in March, recommended reading this by them.

4. IAA Cosmic Studies

4.1 Current Studies

Study Group 4.16 Chair or representative: Alkalai/Graziani/Bousquet/Laufer The Applications of Micro-Satellites and Cube-Sats to Planetary Science and Exploration Missions

- Based on the minutes on March meeting, commission 4 discussed how to handle this study.

(From March Meeting Minutes)

According to the status report by Alkali, the study has an updated outline, and table of contents, and a partial draft has been completed. First full draft will be provided at the IAC-17 in Adelaide. It was agreed that if no delivery is provided by Adelaide, Commission 4 would explore alternative approaches to reach completion of the study, which may include closing the study down, or reorganizing the roles in the study. The study has been dragging on too long, and reaches the limits of an expected closure.

Alkalai identified (in Guadalajara) challenges for the study are: Limited visibility to international aspects, e.g., Europe or other parts of the world are currently not addressed, and the main focus is on US activities. (The statement has been corrected, as Russian researchers are already contributing to the study.)

- Commission 4 Chair determined to recommend to close based on the discussion with study group chair. We request paper for IAC 2018.

Study Group 4.17 Chair or representative: Cappelletti/Graziani/Massimiani Space Systems for Biomedical Research

- Chair Tsuchida showed provided table of contents of study report. And he mentioned “Based on his experience to run biomedical space experience on ISS, researcher of biomedical area usually requests a lot of down link such as microscope video data, etc. Although using recommended small size space craft might have challenges, he is interested in to see this study result.”
- On going and 1st draft is expected at spring meet in 2018.

Study Group 4.18 Chair or representative: Cho/Graziani/Polansky Definition and Requirements of Small Satellites Seeking Low-Cost and Fast-Delivery

- Publication Process, small edition based on review review result was sent on Aug 25.

Study Group 4.19 Chair or representative: Horikawa/Coradini Promoting Global Space Knowledge and Expertise in Developing Countries

- No update is provided, Status is unclear.
- Chair Tsuchida will follow up this study group off line.

Study Group 4.20 Chair or representative: Bao Weimin/Contant Space Information Application in Earthquake Emergency Response

- No update is provided, Status is unclear.
- (Chair's note, after commission meeting, one contact visited in front of both Chair and Vice chair, and then explained current status: “Editing in progress and status update will be in spring meeting in 2018”, based on this explanation chair decided to report this to SAC, however Chair also stated to the contact that when they have a plan to show up but need to adjust time, advanced notification is required.)

Study Group 4.21 Chair or representative: Belokonov/Schilling Distributed, Networked, Smart, Cooperating Small Satellite Formations

- Editing in progress, meeting at COSPAR 2017 in Korea, another meeting during IAC2017
- 1st draft planed at spring meeting on 2018.

4.2 New Studies Proposals

All

Study Group 4.22 Chair or representative: Teofilatto/Filatyev Through Optimization of Aerospace Trajectories

- Endorsement letter provided by Commission 4 chair M. Ovchinnikov on Aug 24

Study Group 4.23 Chair or representative: McKnight/Hanada/da Silva Practical Solutions for Post Mission Deorbit for Micro/Nano/Pico Satellites in Low Earth Orbit

- Endorsed by commission 4 today on recommendation by permanent small satellite committee.

Study Group 4.XX (24) Chair or representative: Mugellesi Roberta (ESA) Open knowledge management communities and link to Integrated Application

- Proposal sent to commission leadership for endorsement (New Chair and Vice-chair request Dr. Mugellesi to send proposal.)
- TOC by spring meeting 2018, first draft at IAC2019
- Advertise to recruit more members at Global Application

5. IAA Conferences

5.1 CURRENT IAA CONFERENCES

- A) 1st IAA Latin American Symposium on Small Satellites: Advanced Technologies and Distributed Systems, Buenos Aires, Argentina — March 7–10, 2017
 - Proposed by Livio Gratton, Rainer Sandau
 - More than 200 participants from more than 10 countries, follow-up already in planning
- B) 11th IAA Symposium on Small Satellite for Earth Observation, Berlin, Germany — 24th–29th, April, 2017
 - More than 200 participants, high level presentations, 12th in 2019
- C) 3rd IAA DyCoSS-2017
 - Moscow, Russian Federation — 29th May–1st June, 2017
- D) 1st IAA North East Asia Symposium on Small Satellites — Serving the Needs for the Benefits of the Region, Ulaanbaatar, Mongolia — August 21–23, 2017
 - Proposed by M. Saandar, Rainer Sandau
 - More than 60 participants from all over SE Asia, follow-up already under discussion
- E) 4th IAA Conference on University Satellites Missions & CubeSat Workshop
 - Roma, Italy — December 04–07, 2017

5.2 IAA SYMPOSIA AT IAC

- A) B4 24th Small Satellite Missions
 - 12 sessions including 3 joint sessions (with C4 propulsion, GTS, A6 space debris) – 2 new sessions

- 239 abstracts, 148 accepted
- B) D5 Safety, Quality, Knowledge Management
 - 4 sessions including one new session on cybersecurity
 - Interest in a fifth session in future with number of submissions growing

5.2 New Conferences proposals

All

6. IAA Heads of Space Agencies Summit

7. Other Business

All

8. Adjourn

<List of Participants>

Commission 7 MTG Sep 23 1300-1600

Name	Role (ex. s/g chair etc).	Email
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