

Proposal for Forming an IAA Study Group SG 5.12

Title of Study:

Dynamics of Space Exploration Strategies and Future Outlook

Proposer(s): Pascale Ehrenfreund

(Must be member(s) of the Academy M or CM)

Primary IAA Commission Preference: Commission 5

(From Commission 1 to Commission 6)

Commissions: 1 Space Physical Sciences, 2 Space Life Sciences, 3 Space Technology & Systems Development, 4 Space Systems Operations & Utilization, 5 Space Policy, Law & Economics, 6 Space and Society: Culture and Education

Secondary IAA Commission Interests:

(From Commission 1 to Commission 6)

Commission 3

Activities will be conducted in full coordination with IAA Heads of Space Agencies Summit Follow-on strategic objectives of the Human Spaceflight Coordinating Group and in coordination with the Robotics Exploration Coordinating Group.

Members of Study Team**Chair(s): Pascale Ehrenfreund**

(Must be member(s) of the Academy, M or CM)

Secretary: Nicolas Peter**Other Members:**

(Open to members and non- members of the Academy)

This IAA Cosmic Study will be developed on a volunteer basis with the help of key selected international experts and practitioners and members of the Academy representing a broad set of expertise from scientific and technical, social sciences, law and humanities background.

Participation of members from IAA, the Committee on Space Research (COSPAR), Panel on Space Exploration (PEX), the International Institute of Air and Space Law (IISL) and other international space exploration working and analysis groups will be sought.

All names are tentative:

John Logsdon
John Rummel
Kazuto Suzuki
Jacques Masson
Max Grimard
Tanja Masson-Zwaan
Giorgio Saccoccia
Gerda Horneck

Short Description of Scope of Study

Overall Goal:

(Expected scientific or practical benefit of the study group's efforts)

The objective of the IAA Cosmic Study is to compile a comprehensive space policy report on the current state and potential evolution of the domain of space exploration ("Dynamics of Space Exploration strategies and Future Outlook").

When alliances are pursued, the interests and involvement of the major stakeholders have to be well balanced and coordinated at a national level. For this reason, stakeholders have to engage together in the decision-making process and converge toward agreed-upon objectives. Cross-fertilization and idea exchange among stakeholders must be encouraged.

The IAA report aims to survey on-going plans of major space actors, discussions in existing technical fora (COSPAR, ISECG, ILEWG, IMEWG, etc.) and newcomers in the field (including the private sector) as well as take into account existing legal frameworks such as planetary protection. This study will provide an up-to-date view of the international space exploration context and will identify the drivers and trends of various individual space stakeholders. In order to outline potential policy options for exploration one must take into account scientific, technological, political and legal motives to support decision-makers and the community especially in the light of 2010 IAA Summit Declaration and the newly launched high-level space exploration policy dialogue (e.g. Lucca Conference 2011). This study will identify emerging challenges and opportunities in order to align space stakeholders nationally and internationally.

Preliminary results of the study are expected to support the Heads of Space Agencies Summit on Exploration (Robotics and Human Space Exploration) to be held in January 2014.

The first task of the team will be to draft a detailed Outline, in order to focus the study on those key topics, which are of particular relevance for IAA and for the preparation of the Thematic Summit.

Intermediate Goals:

Methodology:

(Email works, workshops, stand alone conferences, interim publications, etc.)

The methodology of this multidisciplinary study will be based on the analysis of existing open literature, selected interviews and workshops both in Europe and the United States. Most of the exchanges will be conducted by teleconference and email. Co-located working meetings will be organised along-side major conferences (IACs, IAA standalone conferences, etc.).

Time Line:

(Cannot exceed three years)

The study is expected to be completed in about two years' time (draft report) and to allow sufficient time for IAA review process.

Preliminary outputs shall be made available for January 2014

Final Product (Report, Publication, etc.):

The final product is an IAA Cosmic Study that represents the views of the Academy. The study will be published by the IAA and widely disseminated at international fora, such as the UNCOPUOS but also the space agencies and at conferences such as AGU, IAC, COSPAR General Assembly, Space Symposium, and in peer-reviewed journals and briefs sent to space policy decision makers and takers.

Target Community:

This report aims to provide an independent and non-partisan view of future space exploration opportunities to better inform the space and non-space communities (including the general public) worldwide.

Support Needed:

Potential support for the organization of the workshops in Europe (Paris – IAA Offices or Vienna – European Space Policy Institute) and the United States (Washington DC – Space Policy Institute) will be sought.

Potential Sponsors:

Not yet identified. To be discussed for the publication of the study

To be returned to the IAA Secretary General Paris

*by fax: 33 1 47 23 82 16 or
by email: sgeneral@iaaemail.org*

Date: 01/02/2013

(No Signature required if document authenticated).

Follow-up Section for IAA use only

Initial Phase

Application received:

01 February 2013

Commission Approved:

11 February 2013

SAC Approved:

Web Site Section opened:

Members Formally Appointed by IAA:

Final Phase

Peer Review by Commission Completed:

Recommended by the Commission:

Final Report Received:

SAC Approved:

BOT Accepted:

Publisher Selected:

Study Published: