

## Proposal for Forming an IAA Study Group : S 3.6

**Title of the Study:**

“Strategies and Concepts for Future Exploration and Commercial Development of the Solar System – the ISS and Beyond”

**Proposer(s):**

John C. Mankins

**Primary IAA Commission Preference:**

Space Technology and Systems Development (AC III)

**Secondary IAA Commission Interests:**

Space Systems Operations and Utilization (AC IV)

**Members of the Study Team**

**Chairs:** John C. Mankins (USA/NASA)  
Ernesto Valerani (Italy; Proposed)

**Secretary:** Michael Duke (Lunar and Planetary Institute)

**Other Members:** Uwe Apel (Proposed)  
William Siegfried (USA/Boeing; Proposed)  
Heinz-Hermann Koelle (Proposed)  
Luigi Bussolino (Italy/Alenia Spazio; Proposed)  
Others, TBD

**Short Description of Scope of Study****Overall Goal:**

- To facilitate the emergence of an international consensus concerning the future exploration and commercial development of space (beyond the International Space Station) that can enable the increasingly ambitious discoveries across solar system by human and robotics and the profitable commercial development of space during the next 3-5 decades.

**Intermediate Goals:**

- To establish a working community of future planners and innovators focused on the challenge of future exploration and commercial development of space
- To identify and document a range of options for strategies and concepts, including (at a high level) potential research and technology needs and opportunities
- To identify and document the potential benefits of such approaches
- To communicate effectively with the international aerospace community regarding the results of these efforts, including decision-makers as well as the general public

**Methodology:**

The study group will be implemented through annual working meetings at the International Astronautical Congress (IAC), as well as invited-paper sessions at the IAC as method of leveraging ongoing international studies; these means will be supplemented through the use of on-line tools (e.g., web sites and e-mail). Details include: pursuit of innovative strategies and concepts for architectures, missions, space infrastructures, etc., and definition of a formal methodology for assessing and documenting options, and coordination other IAA study groups (and IAF symposia).

**Time Line:**

- Preliminary study group planning meeting – Toulouse, France (IAC) in October 2001
- First study group session and workshop – Houston, Texas (WSC), 2002
- First Book based on study group activities – Fall, 2003

**Final Product (Report, Publication, etc.):**

- Working Products – Working Notes, workshop reports, etc.
- Interim Products – Papers (for IAC and peer-reviewed journals)
- Final Products – Books formally documenting study group results

**Target Community:**

- Members of the IAA
- Participants of the international aerospace community, including Agency decision-makers
- International public

**Support Needed:**

- Areas of support needed to accomplish the goals of the study group will including travel funds from sponsoring organizations/individuals for members to participate in meetings
- IAA support for operational logistics for the group (e.g., annual meetings at IAC, etc.)
- IAA support for the planned eventual publication of books emerging from the study group

**Potential Sponsors:**

TBD

*To be returned to IAA Secretariat Paris fax: 33 1 47 23 82 16 email: [sgeneral@iaanet.org](mailto:sgeneral@iaanet.org)*

Date:

Signature:

***For IAA Use Only:***

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**Received** : 15/03/01

**Validated** : 27/03/01

**by** : G. Haerendel, approved by the Board on March 27, 2001

**Comments :**

The Study Group is expected to provide progress status and final organization at the Academy Day, September 30, 2001 in Toulouse. This study must be coordinated with S 1.1 Next Steps in Exploring Space and with S 3.4 Development of Infrastructure for International Human Space Exploration.

**Last modification :**