

IAA Study Group Status Report

Responsible Commission: V

Study Number and Title: SG 5.12

Dynamics of space exploration activities and outlook

Short Study Description (repeat from Study Group Proposal):

The objective of the International Academy of Astronautics (IAA) Cosmic Study "Dynamics of Space Exploration" is to compile a comprehensive space policy report on the recent developments and trends of the space exploration domain. A new vision for space exploration has to be bold, collective, holistic, paved with realistic milestones shared by the stakeholders and conceived in a sustainable manner. A new value proposition for space exploration should be pursued such as measuring the scientific, technological, economic and cultural benefits for humankind. The goal is to develop a common integrated space vision. This common space vision could be implemented in the future by an international Space Exploration Council that acts as an efficient planning and decision-making body and unites a number of stakeholders from governments, space agencies, space entrepreneurial entities, the aerospace industry, the scientific community, and civilian society from all spacefaring countries. It will present a synergistic approach with a top down structure supported by bottom up activities of science/technology analysis and space architecture working groups. In this IAA Cosmic Study we identify challenges and opportunities in order to align space stakeholders nationally and internationally and discuss how an international Space Exploration Council could reconcile the interests of "individual" countries and private pursuits.

Progress in past six months:

Since early February 2015, almost all the contributors have updated their initial inputs namely in the following sections of the report:

- 2.1 Changing space exploration context
- 3.1 The Moon: substantially rewritten and enriched
- 3.3 The Martian moons Phobos and Deimos
- 3.4 Near Earth Objects (NEOs): significantly enriched
- 4.1 Human spaceflight
- 4.3 Technology roadmaps
- 4.4 Access to space: completely rewritten and substantially extended
- 5.1 International space treaties
- 5.2 Multinational non-binding initiatives on space sustainability: significant updates
- 5.3 Legal issues: Planetary protection and stewardship

Website Study Information update: (please give any update regarding Study Group Membership, documents, Study Plan and Schedule):

Please list the additional persons here under. I understood in February that IAA would contact the persons I indicated to confirm membership acceptance to this IAA study. If you want me to do so, I can do it. 11 contributors are missing on the website

Issues requiring resolution? (recommend approach):

Product Deliveries on Schedule? (If modified explain rationale):

New entries have come at a rather slow rate despite three reminders. Last inputs were received late August, 3-4 months later than the initial schedule. If things would have stayed on course as expected and indicated in the presentation of the status report in March, a draft report would have been ready by late September-early October. We are now considering having a draft ready by late December or January 2016.

Study Team Member Changes? (List any Study Team Members that you wish to discontinue, and provide names plus contact coordinates of any Members you wish to add on the second page of this Study Update form.) Note: Complete contact information including email, tel. and fax must be provided for all additions. Only Members with complete contact information will be listed and receive formal appointment letters from the IAA Secretariat.)

Name of person providing Study Group Status (Study Group Chair or Co-Chair):

Status Report Date:

Chair: Serge Plattard, serge.plattard@espi.or.at

Co-Chair: Pascale Ehrenfreund, pehren@gwu.edu

Secretary: Nicolas Peter, Nicolas.peter@esa.int

Study Team Membership Changes

Effectivity Date:

Added names to those listed on the website are from the outset of the Study

Discontinue:

Name

Current email address

Add:

Name Mark Lupisella

Current email address mark.l.lupisella@nasa.gov

Name: Horneck, Gerda

Current email address: Gerda.horneck@dlr.de

Name: Mackwell, Steve

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Current email address: oventskowsky@hotmail.com

Name: Westall, Frances

Current email address: westall@cnrs-orleans.fr