

Proposal for Forming an IAA Study Group - SG 5.15

Title of Study:

Space Traffic Management – Towards a Roadmap for Implementation

Proposer(s):

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

Kai-Uwe Schrogl (M)

Primary IAA Commission Preference: 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: 3 and 4

(From Commission 1 to Commission 6)

Members of Study Team

Chair(s):

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

Kai-Uwe Schrogl, Germany (ESA) (M)
Corinne Jorgenson, U.S. (Advancing Space) (M)

Secretary:

Jana Robinson, Czech Republic (EEAS) (CM)
Co-Secretary: Alexander Soucek, Austria (ESA)

Other Members:

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

Confirmed:

Didier Alary, France (Airbus Defence and Space)
Niklas Hedman, Sweden (UNOOSA)
Ken Hodgkins, U.S. (Department of State)
Olga Volynskaya, Russian Federation (Roscosmos)

Possibly other contributors to the 2006 study

Short Description of Scope of Study

Overall Goal:

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

This study shall follow-up the IAA Cosmic Study on "Space Traffic Management" (STM) of 2006 and is expected to be published ten years after that first one. The 2006 was a landmark publication and launched a broader debate on STM.

Further to the 2016 study, it shall provide a detailed update on technical elements for an STM regime and in particular provide a first approach to the concrete implementation of a comprehensive regime comprising legal and governance structures.

Publication in 2016 will provide for dissemination of the study during the 50 year anniversary of the Outer Space Treaty in 2017.

The leadership of this proposed new study group has already managed the 2006 study.

Intermediate Goals:

Stepwise development of the following foreseen structure:

- 1) Introduction and scope of the study
- 2) Academic research update since the 2006 STM IAA Cosmic Study
- 3) The space environment 2015-2030
 - space activities
 - space debris
- 4) Status of regulation
 - the current regulatory regime for space activities
 - current regulatory regimes of comparable traffic systems
- 5) Refined elements of a STM regime
 - launch phase
 - in orbit phase
 - re-entry phase
- 6) A roadmap for implementation of a STM regime
 - a draft structure for a STM treaty
 - experiences from the implementation of comparable (traffic) regimes
 - a roadmap comprising institutions and timeline
- 7) An action plan for implementation

Methodology:

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

Email works

IAA meetings at the occasion of IACs 2014 and 2015

IAA Spring Meeting of 2015

International Academy of Astronautics (IAA)

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Instructions and application form: see: "Scientific Activity" section at <http://iaaweb.org/content/view/256/393/>

Time Line:

(Cannot exceed three years)

Publication: November 2016

Adoption by IAA: October 2016

Final Draft for IAA Peer Review: IAA Spring Meeting 2016

Drafting and discussion in IAA Commission 5 until end of 2015

Final Product (Report, Publication, etc.):

Report as an IAA Cosmic Study.

Target Community:

All institutions and individuals concerned with space regulations.

International organizations and forums: UNCOPUOS, ITU, ICAO, IADC etc.

National ministries and agencies.

Support Needed:

Potential Sponsors:

ESA

Advancing Space

To be returned to the IAA Secretary General Paris

by fax: 33 1 47 23 82 16 or

by email: sgeneral@iaamail.org

Date:

Name:

(No Signature required if document authenticated).

International Academy of Astronautics (IAA)

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Instructions and application form: see: "Scientific Activity" section at <http://iaaweb.org/content/view/256/393/>

Follow-up Section for IAA use only

Initial Phase

Application received: 18 September 2014

Commission Approved: 26 September 2014

SAC Approved: 27 September 2014

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: