

## Proposal for Forming an IAA Study Group SG 5.14

**Title of Study: Reference Report on Space Debris**  
*Could be Situation Report or Status Report...*

**Proposer(s): Christophe Bonnal**  
*(Must be member(s) of the Academy M or CM)*

**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: 1, 3, 4, 6**

*(From Commission 1 to Commission 6)*

### Members of Study Team

**Chair(s): Bonnal**

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

**Secretary:**

**Other Members:**

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

**Klinkrad**

**Agapov**

**Schidknecht**

**Alby**

**Finkelman**

**Krisko**

**Matney**

**McKnight**

**Kibe**

**Schäfer**

**Martin**

**Mathieu**

**Masson-Zwaan**

### Short Description of Scope of Study

#### Overall Goal:

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

Reference status of the Space Debris problematics, acting as an update of the IAA Position Papers 1993 and Revision from 2001, taking into account the IAA Position Papers on Space Debris Mitigation (SG5.1) and on Space Debris Remediation (SG5.5). Available elements from on-going SG5.10 devoted to Policy, Legal and Economic Issues in Orbital Debris Removal will also be included.

#### Intermediate Goals:

Presentation at IAC 2014 in Toronto of the Final Draft Content through a Plenary Event or Highlight Lecture type of session.

### Methodology:

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

Work by e-mail to have a preliminary draft by March 2014.

Status during the March meeting of the IAA Space Debris Committee in Paris

Final Draft in Toronto reviewed within the March meeting of the IAA Space Debris Committee

Delivery to IAA for Peer Reviewing and final process

Effective publication expected before IAC 2015

Draft table of contents and chapter captains:

Introduction, recall of scope and past studies: Christophe Bonnal

Present status: Heiner Klinkrad

Measurements: Thomas Schildknecht & Vladimir Agapov

Space surveillance & collision: Fernand Alby & Dave Finkelman

Reentering space objects: Paula Krisko & Mark Matney

Future environment: Paula Krisko

Debris mitigation: Mark Matney

Remediation: Darren McKnight & Seishiro Kibe

Protection: Franck Schäfer & Martin Rudolph

Legal: Tanja Masson-Zwaan

References & Standards: Christophe Bonnal

International aspects: Charlotte Mathieu

### Time Line:

*(Cannot exceed three years)*

Final Draft for Peer reviewing after 1 year

Effective publication: 2 year.

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

IAA Reference Report on Space Debris

Dedicated publication ≈ 50 pages

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

**Target Community:**

Very wide: Space Agencies, Industrial companies, Academics, laboratories, students... any person or entity interested in an updated reference synthesis on the topic of Space Debris

**Support Needed:**

None

**Potential Sponsors:**

None

*To be returned to the IAA Secretary General Paris*

*by fax: 33 1 47 23 82 16 or*

*by email: [sgeneral@iaaemail.org](mailto:sgeneral@iaaemail.org)*

**Date: September 21<sup>st</sup>, 2013**

*(No Signature required if document authenticated).*

**Follow-up Section for IAA use only**

**Initial Phase**

**Application received:**

**Commission Approved:**

**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:**