

IAF SPACE TRAFFIC MANAGEMENT COMMITTEE (STM)

1. Introduction

The IAF Space Traffic Management (STM) Committee TC.26 was created to complete the existing Committees dealing with Space Debris, in the general frame of Space Operations Sustainability.

It enables the general overview of the STM topic, synthesizing the work which is performed in numerous other for a, either formal such as Standardization Bodies (IADC, ISO, ECSS, UNCOPUOS) or informal such as work done in various Academies, think-tanks, general committees...

TC.26 mainly serves as the organizer of a joint work between IAF (International Astronautical Federation), IAA (International Academy of Astronautics) and IISL (International Institute for Space Law); a joint MOU between these three organizations was signed in October 2018, tasking them to develop comprehensive approaches and proposals for STM to be addressed to decision makers.

2. Summary

The TC.26 is structured following several steps.

The first phase consisted in 9 thematic Working Groups; the corresponding findings were presented at IAC 21 in Dubai during a dedicated Special Session.

Since this event, the second phase has dealt with 5 additional thematic Working Groups

Some 137 experts did participate to these Working Groups; they were fully compliant to the IAF 3G motto, Generation with numerous of Young Professionals, mainly from SGAC, Gender with a high percentage of women, Geography with 24 different countries all over the world.

Each Working Group was chaired by two coordinators coming again from everywhere in the world, including China, India, Russia, ...

The second phase was finished shortly before the IAC 2022 in Paris

The results were presented during a dedicated Special Session on 17 September where the final outcome of the two first phases were presented.

The corresponding Executive Summary Report prepared jointly between IAF, IAA and IISL was handed to the three Presidents who signed it in real time at the end of the Special Session (Pascale Ehrenfreund, Kai-Uwe Schrogl, John Schumacher).

Each Working Group also prepared a 10 pages report in addition to its executive summary; the compilation of these reports will be published in a dedicated Special Issue of Acta Astronautica, tentatively by the end of 2022.

3. Highlights

The main highlights concerning TC.26 on STM for the past year are the finalization of the 14 Working Groups, with the publication of the corresponding Executive Summary, signed by the 3 Presidents (IAF, IISL, IAA) at the end of the Special Session on 17 September.

4. Future Outlook

The upcoming activities follow 3 axes:

Numerous participants to the two first phases suggested to continue on some of the 14 first topics, in order to go deeper in the work and complete what was done so far. A set of four new Working Groups are currently under definition, with an open call for qualified volunteers. New topics are under maturation for additional proposals.

The next meeting of the IAF STM Committee will take place during the IAF Spring Meetings in March 2023, and a “Draft Final” status of the activities defined here will be done during the meeting foreseen just before IAC 2023.

5. Committee activities

The Committee holds two formal meetings per year, during the IAF Spring Meetings, and just before the regular IAC. However, each Working Group has its own agenda and meets whenever necessary, usually once per month.