Observers: EU SST Partnership, EUSPA, Norwegian space operators

Experts: none

(1)   Welcome and introduction

The co-chair (DG DEFIS) welcomed the participants and presented the agenda.

(2)   Opening remarks

The Head of Unit of Secure Connectivity and Space Surveillance in DG DEFIS, highlighted the increasing risk of in-orbit collisions, absence of agreed rules and guidelines, and resulting threats to space assets, and pointed to the EU approach on Space Traffic Management (STM) which proposes a range of actions to address these risks to space safety and sustainability. In this context, subgroup 1 will gather STM requirements and impacts of civilian and military space operators, such as technical, operational, data-sharing, or administrative needs, difficulties and impacts of increasing space traffic on daily operations, and ideas on how these challenges could be addressed. Civilian and military operator needs are very different, so hearing from both communities will help to develop measures that are robust, flexible, and beneficial for both. He concluded by encouraging operators to use this group as an opportunity to share their concerns, difficulties, needs and ideas which will feed into a comprehensive set of requirements and impacts of both communities; this will serve as valuable input for future EU policies and measures, supporting operators in keeping their assets and operations safe.

The Deputy Head of Division of SECDEFPOL Space in EEAS, highlighted that an EU approach can contribute only a part to the global challenge of increasing space traffic, so cooperation with international partners is essential. STM is and remains civilian, but it is important to look at the needs of both communities who share the same space. This is a lesson learned from air traffic management where similar challenges were identified and have led to closer cooperation between both communities. This is why the European Defence Agency (EDA) will gather the views of military operators and channel them into

the work of this subgroup. He concluded by stressing that DG DEFIS and EEAS will keep operators in the loop throughout the implementation of the EU STM approach so that their needs are considered in EU policies and measures.

(3) Context of EU Space Traffic Management

DG DEFIS gave an overview of major milestones on the development of the EU STM approach followed by an update on the work of the STM main and other subgroups so far in implementing the EU STM approach as regards STM requirements, operational capabilities, and regulatory aspects. EEAS then briefly presented activities implementing the international dimension of the EU STM approach.

(4) Subgroup 1 working methods

Overview of Terms of References and Rules of Procedure

DG DEFIS presented key elements of the Terms of References and Rules of Procedure of STM subgroup 1 which participants had received before the meeting. The STM stakeholder mechanism mirrors the four avenues of the EU STM approach and is therefore organised into one main group and four subgroups; subgroup 1 will develop an understanding of requirements and impacts of STM developments for space operators.

Cooperation on civilian requirements

DG DEFIS explained that it plans to gather requirements of civilian operators by coordinating closely with the EU SST Partnership and the EU SST Front Desk at EUSPA; this will build on, but go beyond, the gathering of user needs that both entities ensure already today through regular exchanges, draft documents and requirements, interviews, etc. It added that operators or experts could be invited to share their insights on specific aspects in upcoming meetings, further enriching the work of this subgroup.

Cooperation on military requirements

EDA explained that, based on its mandate granted by the EDA Steering Board, it will act as a military interface for Ministries of Defence in this subgroup, facilitating the coordination of military views, assisting in the development of capability needs, and facilitating communication between the military community and EU institutions based on its Ad Hoc Working Group on SSA, the Defence in Space Forum, and other sources.

(5) Zoom-in on civilian and military STM operators

EU SST operator overview

EUSPA presented an overview of the service provision ensured by the EU SST Front Desk, highlighting the Service Provision Portal for space operators to exchange details in case of an incident complemented by the helpdesk providing support. It gave a detailed overview of civilian EU SST users outlining the number of organisations in total and per service, and the number of satellites in total, per orbit regime, user community, and size.

The <u>EU SST Partnership</u> presented the onboarding process of new users to EU SST Collision Avoidance services outlining requirements to comply with by, and technical details agreed between, an operator and EU SST in its Service Configuration Document (SCD) complemented by typical thresholds for a High-Interest Event per orbit regime. <u>DG DEFIS</u> added that the SCD offers ideas for operational STM requirements; aspects of the SCD will therefore be discussed in more detail as part of the work of this subgroup.

EDA military perspective

<u>EDA</u> presented a non-consolidated list of military operator requirements which includes early involvement in EU STM activities, links between STM and ATM operations, and a list of potential challenges and developments such as enhancing space object catalogues, overcoming civil/military dichotomy, or establishing appropriate data sharing policies.

<u>DG DEFIS</u> flagged that some of the military requirements presented are also known civilian requirements, so there is common ground for some aspects. <u>EEAS</u> highlighted the importance and added value of developing exchanges between both communities; the first set of ideas are therefore a valuable starting point for the work of this subgroup.

Preliminary insights on operator requirements

<u>DG DEFIS</u> zoomed in on aspects of two H2020 studies offering preliminary insights on civilian operator requirements. These studies pointed towards e.g., automating STM interactions, covering all mission phases, coordinating with other regional STM systems, monitoring compliance with rules and guidelines, and coordinating with ATM operators.

<u>EDA</u> offered initial insights on military requirements which explore e.g., launch and re-entry of assets, improvement of launch and collision avoidance processes, civilian-military cooperation and management of dual-use space, manoeuvring capabilities of military assets, actions for debris removal, and capabilities of decision-making processes.

(6) Exchange of views on preliminary areas of focus of civilian and military STM requirements

Participants had received three STM questions to reflect upon before the meeting. The co-chairs invited participants to share their views during the meeting.

<u>DG DEFIS</u> proposed some areas to consider as part of the work of this subgroup, such as 1) data sharing; 2) standards; 3) prioritisation of users; 4) mission phases; 5) links to higher airspace operations; 6) human spaceflight; and 7) propulsion systems. <u>EEAS</u> added 8) already operational spacecraft, and 9) payload considerations.

Subsequent discussions revolved around the need for more precise data vs. more frequently updated data, hesitations among civilian operators to share their position and planned manoeuvres, other aspects such as operators' risk appetite, spacecraft categories, and liability, as well as applicability of obligations to EU and non-EU operators.

(7) Conclusions and next steps

DG DEFIS thanked the participants for their attendance in this first meeting and invited them to submit their answers to the three STM questions by end June 2024. A synthesis of replies received will be presented in the next meeting. The co-chairs thanked the participants for their attendance and closed the meeting.

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LIST OF ATTENDEES

EU/EEA country	authority/organisation/service	represented interests
France	Airbus	EU space operators
France	CNES	EU space operators
Netherlands	Delft University of Technology	EU space operators
Germany	ESA	EU space operators
Germany	EUMETSAT	EU space operators
France	Eutelsat	EU space operators
Spain	GEOSAT	EU space operators
Norway	Norwegian Space Agency	EEA space operators (except EU)
Italy	Sitael S.p.A.	EU space operators
Spain	Universidad Politécnica de Madrid	EU space operators
France	University of Montpellier - University Space Center	EU space operators
EU	EU SST Partnership	EU space policy
EU	European Commission	EU space policy
EU	European Defence Agency	EU space policy
EU	European External Action Service	EU space policy
EU	European Health and Digital Executive Agency	EU space policy
EU	EU Space Programme Agency	EU space policy