

SPACE SURVEILLANCE AND TRACKING (SST) - SPACE USERS MARKET SEGMENT UCP 2025

Meeting Date	04.12.2025	Location	Prague, Czechia (Hybrid event)
Meeting Called By	EUSPA		
Minutes Taken By	Riccardo Nicolè (GSOp), Beatriz Gallardo (EUSPA)		
Representatives & Speakers	Beatriz Gallardo, EUSPA Session Chairperson Laura Gandyra, European Commission Pascal Faucher, CNES/EU SST Speakers / Moderators Cristina Pérez, Head of the EU SST Service Provision Expert Team, AEE/EUSST Óscar Rodríguez, Senior SSA Engineer, Okapi: Orbits Guillaume Vazeille, Senior System Engineer & FD Specialist, EnduroSat Marta Fernández, NM Space Coordinator, Eurocontrol Pierluigi Righetti, FD Manager, Eumetsat Carlos González, SATCOM OPS Manager, Hisdesat David Mostaza, Head of Space Segment and Satellite Operations, Hispasat Ivan Miralles, GSOp Satellite Service Engineer, SpaceOpal		
Distribution (in addition to attendees)	UCP Space Session, EUSPA, Public		

AGENDA

Agenda Items	Presenter
1. Welcome and introduction	Beatriz Gallardo, EUSPA Laura Gandyra, European Commission Pascal Faucher, CNES/EU SST
2. EU SST Use Cases	
2.1. Experience of a Delegated Entity with the CA service	Óscar Rodríguez, Okapi: Orbits
2.2. Experience of a Satellite Operator with the CA service	Guillaume Vazeille, EnduroSat
2.3. Experience of an aviation user with the RE Analysis service	Marta Fernández, Eurocontrol
3. Panel on SST Information Sharing	Cristina Pérez, AEE/EU SST Pierluigi Righetti, Eumetsat Carlos González, Hisdesat David Mostaza, Hispasat Ivan Miralles, SpaceOpal
4. Remarks and Conclusions	Beatriz Gallardo, EUSPA

SUMMARY

Summary

- Participation in the panel was notable, both in terms of attendance and the level of engagement from speakers and participants.
- The presentations illustrated how EU SST services are used across different user communities, highlighting concrete operational use cases, associated benefits, and current limitations.
- User needs identified during the session included the use of a single, centralised information hub, the availability of APIs to ensure interoperability, comprehensive interface documentation, and more transparent and streamlined access to SST data.
- From an aviation perspective, the need for stronger integration between SST and an increasingly structured aviation sector was highlighted, including the importance of adapting SST services to aviation operational requirements.
- The panel underscored the importance of timely and easily retrievable information, noting that immediate access to critical data can be decisive in preventing the loss of valuable orbital assets.
- Several operational examples illustrated the challenges posed by the increasing volume of space traffic, as well as the limitations arising from fragmented information and constrained data-sharing practices.
- The discussion highlighted a growing need for improved coordination, faster reaction times, and higher levels of automation, supported by interoperable APIs and timely access to relevant data.
- At the same time, participants acknowledged that information sharing must be balanced with security considerations and that the “need-to-know” principle should underpin any data-sharing approach.

MINUTES OF MEETING

Agenda Item 1. Welcome and Introduction

Beatriz Gallardo (EUSPA), Laura Gandyra (European Commission), and Pascal Faucher (CNES/EU SST)

Beatriz Gallardo opens the session by welcoming participants, setting the context of the meeting, and presenting the agenda. She also introduces the speakers, framing the scope of the session and its main topics. Laura Gandyra subsequently provides an overview of the history and current status of EU SST, highlighting its evolution and key milestones, and expresses her appreciation to the organisers and participants for their continued engagement. Pascal Faucher closes the session with a recap of the main EU SST achievements to date, emphasising the growing level of general awareness and recognition of space safety and space traffic coordination at both institutional and operational levels.

Agenda Item 2. EU SST Use Cases. Óscar Rodríguez (Okapi: Orbits), Guillaume Vazeille (EnduroSat), and Marta Fernández (Eurocontrol)

Agenda Item 2.1. Experience of a Delegated Entity with the CA service. Óscar Rodríguez.

After a concise introduction to the company and its services, the presenter outlines its activities within the EU SST framework. The presentation then explains how the retrieved SST data are used, covering key operational aspects such as risk monitoring, collision avoidance, manoeuvre planning, and automated coordination. The session concludes with the main lessons learned and an overview of emerging challenges.

Identified user needs include the use of the EU SST portal as a single, centralised information hub, the availability of APIs to ensure interoperability with external systems, full interface documentation, and more transparent and streamlined access to data. The proposed way forward directly addresses these needs while preserving and enhancing the operational value delivered to users.

Agenda Item 2.2. Experience of a Satellite Operator with the CA service. Guillaume Vazeille.

The presentation opens with an overview of the company and its service portfolio, followed by a chronological description of how EU SST services are used across the different phases of satellite operations. This includes the management of configuration data during the early life of satellites, as well as the routine use of orbital data and conjunction alerts during nominal operations. In response to alerts, collision avoidance manoeuvres are analysed and validated, with coordination performed in close interaction with the EU SST operations centres.

From a user perspective, the continuously increasing volume of space traffic creates a strong need for higher levels of automation and faster response times, supported by the use of APIs and more streamlined communication.

Agenda Item 2.3. Experience of an aviation user with the RE Analysis service. Marta Fernández.

The presenter provides an aviation-user perspective on space surveillance and outlines the organisation's profile and mission. An overview of air traffic figures and how it is distributed through the Network is presented. The organisation's activities include the management of the ATM network and coordination during crisis events, including those involving the re-entry of space objects. The process of uncontrolled re-entries is described from the organisation perspective, highlighting that the EU SST RE service has recently been made accessible worldwide. The speaker emphasised the need for EU SST RE service to be adapted to the specific operational needs of the aviation sector.

Agenda Item 3. Panel on SST Information Sharing. Cristina Pérez (AEE/EU SST), Pierluigi Righetti (Eumetsat), Carlos González (Hisdesat), David Mostaza (Hispasat) and Ivan Miralles (SpaceOpal).

Cristina Pérez opens the panel discussion highlighting the rapid evolution of the SSA ecosystem, marked by a growing number of events that require close coordination among operators of active spacecraft. She notes that, in March 2025, the United States department of Commerce released the first Data and Information Policy for the TraCSS system, introducing an open-data approach with limited exceptions for sensitive content. In parallel, other public and private actors are developing SSA services, each adopting different data privacy and information sharing.

In this context, EU SST seeks to better understand user perspectives on the sharing of specific SST information to support space traffic coordination, setting the scene for the panel discussion. Cristina Pérez then introduces the panellists and moderates a series of questions, which are addressed in turn by each participant.

Q#1: *Could you briefly describe an operational situation in which coordination in SST played a key role—either positively, or where challenges emerged?*

Pierluigi Righetti presented a case in which insufficient data availability resulted in the development of parallel and conflicting resolution plans. Delays arising from inadequate communication between two involved entities led to a last-minute resolution. Although the situation was ultimately resolved without adverse consequences, it constituted a near-miss event.

Carlos González described a case where limited information sharing by a non-cooperative organisation necessitated additional analysis and investigative efforts to mitigate a potential accident. Several actions were undertaken without full assurance that the situation had been correctly assessed, given the uncertainty associated with the available information.

David Mostaza reported an incident involving the temporary loss of contact with a GEO satellite. In the absence of sufficient information to support a well-informed decision, a conservative approach was adopted and no action was taken. While the situation evolved favourably, the outcome was largely attributable to chance rather than to informed operational decision-making.

Ivan Miralles outlined a case in which an alert required rapid assessment, ultimately leading to the decision to execute a manoeuvre based on the information available at the time.

Taken together, these cases demonstrate that limited information sharing significantly increases operational risk. Although the loss of critical assets was avoided in these instances, the continued growth of space surveillance and tracking demands, combined with the increasing number of space objects, makes such an approach increasingly unsustainable.

Q#2: *Looking back at that situation, what could have been done differently to enhance coordination? In your view, could broader sharing of SST information have improved the effectiveness of the response?*

Ivan Miralles noted that a higher level of automation would likely have enabled a faster response in their case; however, this presupposes adequate data readiness. While acknowledging that not all data related to space operations can be immediately shared with all stakeholders, he emphasised the need to maintain an appropriate balance between data openness and sensitivity.

David Mostaza recalled that no SST services were available at the time of the event he described. He stressed that professional experience remains a key factor in decision-making and that, even when automated responses are employed, a clear understanding of the rationale and assumptions behind the provided data is essential for a sound assessment.

Carlos González underlined that effective cooperation is the foundation for appropriate action and for avoiding decision-making based on incomplete or uncertain information. In his view, cooperation is even more critical than information sharing alone.

Pierluigi Righetti highlighted that rapid reaction capabilities can be a decisive factor, reinforcing the need for earlier warnings. He noted that the event he presented ultimately contributed to the publication of orbital data. At the same time, he cautioned against the risk of overreaction, which could transform a supportive service into an operational burden.

Q#3: *In practical terms, what do you consider to be the minimum level of SST information that should be shared to ensure the safety of operations? Additionally, what type of information would you personally be willing to share, and with whom?*

Pierluigi Righetti stated that, at EUMETSAT, all orbital data are already shared with the exception of Sentinel-6 data. He indicated that Conjunction Data Messages (CDMs) should remain undisclosed unless required, and therefore be made available on demand on a case-by-case basis. He also noted that well-defined data-sharing practices help avoid additional effort related to data selection and quality refinement.

Carlos González acknowledged that not all information can be made public due to security considerations, particularly in relation to defence and national security. He emphasised that decisions on information sharing should be taken on a case-by-case basis and that a minimum set of information should be shared to enable faster access to the relevant data. In his view, recipients should be selected among organisations with comparable mandates, levels of openness, and willingness to cooperate.

David Mostaza recalled that orbital data were historically accessible and therefore argued that making such data available remains justified. He noted that Hispasat already adopts a relatively open approach in this regard and stressed that information sharing and openness should be mutual and reciprocal in principle.

Ivan Miralles concluded by emphasising that the “need-to-know” principle, supported by mutual agreements, should guide data-sharing practices. He noted that Galileo already provides a significant amount of open data, while underlining the importance of delivering the right information at the right time. He also agreed that certain categories of information, particularly those related to specific sensitive topics, require enhanced protection.

Agenda Item 4. Remarks and conclusions.

Beatriz Gallardo provides a recap of the session, summarising the key messages from the presentations as well as the main points raised during the discussion. She reminds participants of the online survey addressed to spacecraft owners and operators, which aims to collect user feedback on the sharing of SST information in support of space traffic coordination and overall space safety.

She informs participants that the UCP plenary session will take place the following day and thanks all speakers and participants for their valuable contributions. She then proceeds to close the session.

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