About EU SST

EU Space Surveillance and Tracking (EU SST) is a key capability that helps to protect space infrastructure and services from in-orbit collisions between space objects and other disruptions. It thereby safeguards European economies, societies and citizens who increasingly rely on space-based services such as navigation or Earth observation, and so contributes to the resilience of European space assets and to a higher level of EU strategic autonomy.

Integrated in 2021 as a full-fledged subcomponent of the EU Space Programme, EU SST is fully operational, with its own network of sensors from EU Member States, a database connecting national Operations Centres, and services provided to users through the EU SST Front Desk at EUSPA. It is also security relevant: its internal data policy protects sensitive information and the security interests of EU SST partners.

Facts and figures

>40 sensors
from EU Member States contributing

>500k measurements
shared per day on average

>14k objects
observed in the last year

>190 organisations
registered

>400 spacecraft
protected

Milestones

Priorities for 2023-2025

- Improve the performance of SST core services and develop additional services
- Open SST services to international users
- Research and further develop EU SST capabilities
- Develop and use innovative technologies to face challenges raised by STM
- Strengthen and enhance the EU ecosystem in commercial sensors and data provision
- Foster synergies between civil and defence capabilities
Service Provision

Collision Avoidance (CA)

provides risk assessments of potential collisions between space objects and recommendations to spacecraft operators on how to mitigate the risk.

- 57 organisations registered
- 402 spacecraft safeguarded
- 781 high-risk close approaches monitored in the last year
- 1 taskforce activations for critical CA events in the last year

Re-entry Analysis (RE)

provides risk assessments of uncontrolled re-entries of space objects into the Earth’s atmosphere.

- 150 organisations registered
- 94 re-entries monitored in the last year (of which 2% of major risk)
- 2 taskforce activations for critical RE events in the last year

Fragmentation Analysis (FG)

provides detection and characterisation assessments of in-orbit fragmentations, break-ups or collisions.

- 147 organisations registered
- 6 fragmentation events first reported in the last year
- 661 fragments first reported in the last year
- 1 taskforce activations for critical FG events in the last year

Front Desk

The Front Desk provides the secure interface for delivering the SST services to users (SST Portal) and ensures user support and engagement.

- >123k products delivered through the SST Portal in the last year
- 123 new users registered in the last year
- 109 new satellites registered in the last year
- 604 user requests handled by the SST Helpdesk in the last year
- 9434 monthly average website visitors in the last year
- >10k social media followers in total
- 4 taskforce activations for critical events in the last year
- 68 indicators monitored to report on the performance of EU SST

Latest update: 01/07/2023

Feedback from users

The flexibility to adjust the services to the operator’s needs, as for Sentinel-6 acquisition and Metop-A end-of-life operations, is very useful.

- EUMETSAT

The Collision Avoidance service is very responsive. Its personnel is highly attentive and the on-call team is excellent.

- ICEYE

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