



AN EU APPROACH FOR SPACE TRAFFIC MANAGEMENT

CHALLENGES FOR A SAFE, SECURE AND SUSTAINABLE USE OF SPACE

MORE THAN 1 MILLION DEBRIS ITEMS larger than 1cm are orbiting around Earth, an ever increasing number! **MORE THAN 20,000 ADDITIONAL SATELLITES** will be launched in the next ten years.

INCREASING CONGESTION IN SPACE is threatening the viability and security of space infrastructure and operations.

THE SAFETY AND SECURITY of the European economy, society and citizens rely on space-based applications such as communications, navigation and Earth observation.

SPACE TRAFFIC MANAGEMENT

Space Traffic Management (STM) encompasses the means and the rules to access, conduct activities in, and return from outer space safely, sustainably and securely. The EU approach to STM proposes enhanced capabilities, norms and engagement while preserving EU interests in line with the respective competences of the Union and its Member States.

EU to act collectively, swiftly, and resolutely for an EU contribution to a global challenge

KEY ACTIONS



Assessing STM requirements and impacts for the EU

An inclusive and transparent consultation mechanism will be set up to gather STM requirements of all relevant EU partners. Regular dialogue on STM-related developments will cover both civilian and military needs.



Enhancing EU SST capabilities to support STM

The EU Space Surveillance and Tracking (EU SST) constitutes the operational pillar of the EU STM approach. To respond to STM challenges, EU SST capabilities need to be improved to foster a sufficient level of autonomy. Research and development activities will be accelerated for the development of automatic collision-avoidance services and for the use of artificial intelligence and quantum technologies.



Fostering the STM regulatory aspects

Regulatory aspects of STM comprise of non-binding measures (standards and guidelines) and binding obligations (legislation) at the Union level. Positive incentive measures will be put in place to foster the use of the guidelines and standards by EU operators.



Promoting the EU STM approach at a global level

The EU STM approach aims to contribute to a challenge affecting a diverse community of actors, pairing existing regional capabilities and tools with an overall ambition for global cooperation. The European Union will work with key partners and at multilateral level to actively promote pragmatic and concrete solutions towards a global STM.

EU SPACE SURVEILLANCE AND TRACKING 2021 FACTS & FIGURES

EU SST

Space Surveillance and Tracking (SST), the operational pillar for the EU STM, is essential for protecting space-based infrastructure, facilities and services. The EU already has SST capabilities, thanks to those made available by Member States within the EU SST consortium. Already 268 European satellites are safeguarded against the risk of collision. More than 135 public and private organisations from 23 EU Member States are benefitting from EU SST capabilities.

In the first half of 2021, more than **7,000** close approaches were detected across **3** different orbits



+/-300,000
measurements per day

268

satellites monitored

135 organisations registered
coming from 23 Member States

435

Collision Avoidance events and High Interest Events (**more than 1 per day**)

190

approaches
of high-risk

4

Fragmentation
Analysis
events

69

Re-entry Analysis events

