

European Space Policy Institute

The safety and security dimension of space – Setting the scene

Mathieu Bataille, Research Fellow and Lead on Security & Defence, ESPI 25 January 2024, NEREUS event, online



Space for Security & Defence

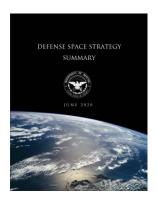


Security & Defence of Space



Space security and defence policies have evolved in recent years around three dimensions:

1. Strategies & doctrines: space as a warfighting domain, a domain of operations...













2. Organisations: multiplication of military bodies dedicated to addressing space issues













3. Capabilities: development and tests of anti-satellite technologies

Space, security and defence at European level



EU approach: intertwining space and defence initiatives

The EU Space Programme integrates security & defence aspects (Galileo, Copernicus, IRIS²)

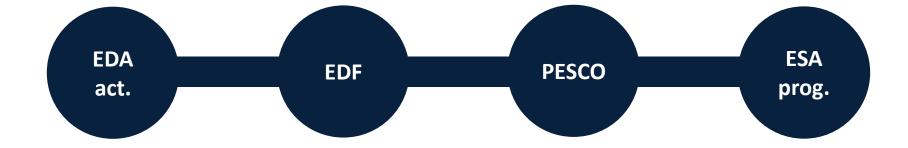
All major defence initiatives involve space components

ESA approach: promoting interconnection of existing systems for security uses

Current programmes and proposed initiatives:

- Rapid and Resilient Crisis Response Accelerator
- Civil Security from Space

Relevant channels of implementation





Major evolution in 2023: Publication of the EU Space Strategy for Security and Defence (EU SSSD)



Five objectives:

- 1. Converging on a vision of the space threat landscape
- 2. Enhancing the resilience and protection of space systems and services in the EU

- 3. Responding to space threats
- 4. Enhancing the use of space for security and defence
- 5. Partnering for responsible behaviours in outer space

Consequences of a growing involvement in military space



Investment in military space

- French Law on Military Programming 2024-2030
 - → €6 bn for space
- German special fund ("Sondervermögen")
 - → Expenditures in early warning, satcom
- Poland bought two EO satellites

Need to develop skills



Attract talents in the military space sector



Ensure adequate training of military space operators



Schriever wargame 2023



AsterX 2023

Space: EU tests its response mechanism to threats

① 15.03.2023

The European Union enhances its response mechanism in view of new threats in space: Space Threat Response Architecture (STRA) 2023 and

Space Threat Response Architecture 2023

The extensive influence of space on the war in Ukraine





Monitoring of a Russian convoy by Maxar

KA-SAT Network cyber attack overview

Viasat is providing an overview and incident report on the cyberattack against the KA-SAT network, which occurred on 24 February 2022, and resulted in a partial interruption of KA-SAT's consumeroriented satellite broadband service.

March 30, 2022 04:55 AM • Viasat, Inc.

Cyberattack against ViaSat's KA-SAT



Use of Starlink for military purposes



Commercial satellite imagery



SIFU initiative

Lessons learned

- 1. The cyber dimension of space infrastructure is key
- 2. Commercial space actors are game-changers

Thank you!

ESPI is the European think tank for space. We provide decision-makers with an informed view on midto-long-term issues relevant to Europe's space activities.







