A STRONGER EUROPE IN SPACE: EMBRACING SPACE SECURITY

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When did the space age begin?



German ballistic missile V2 crossed the Karman Line in 1942 – 100km boundary between air and space

Who are important actors in space?

"The very life blood of societies is vulnerable to attacks in outer space. Every effort must be made to prevent the expansion of state conflict to space and concerted international action must address the risk of counter-population warfare through attacks on satellite technology. The Conference on Disarmament should overcome its frustrating, years-long impasse and agree to begin negotiations dealing with the use of weapons in space. An international code of conduct for outer space activities should also be adopted, taking into account the available draft code."

- The Holy See at UN 1st Committee



UN as global platform for space governance

UN Secretariat UN Office of Outer UN Office for Disarmament Affairs Space Affairs (UNOOSA) (UNODA) **UN Security Council** International **UN Institute for** Telecommunications Disarmament Research Union (ITU) (UNIDIR) **UN General Assembly** 1st Committee - Disammament 4th Committee - Special & International Security Political & Decolonization UN Committee on the Peaceful Uses of Outer Space (COPUOS)

Figure 9: Main UN bodies relevant for space activities



Further reading on global space governance:

EUISS: Space Security for Europe

Growing likelihood of conflict in space?

The secure and sustainable access to, and use of, space and freedom from space-based threats. (OST 1967)

- Space debris
- Security of space assets
- Growing number of actors in space
- Outer space governance

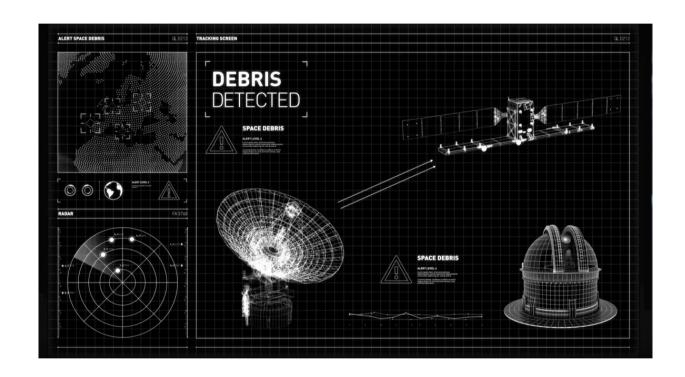
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Further reading on space security: Space Security Index 2016





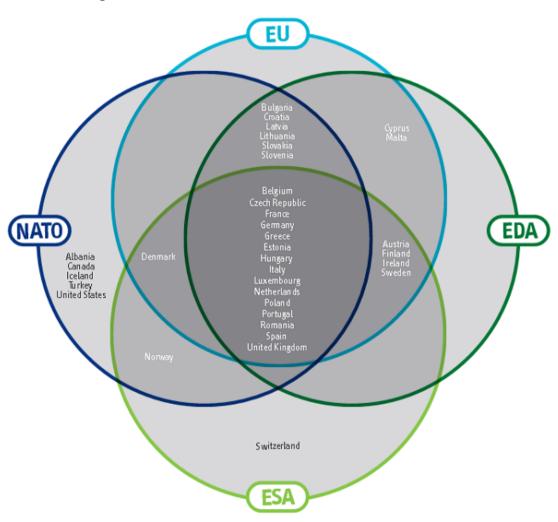
EU Space Surveillance and Tracking



Watch the EU SST video here:

https://www.youtube.com/watch?v=ZcbV_Fyrsf4

Europe in space - institutional framework



EU ambition in space

Major developments in 2016:

- Joint Framework to Counter Hybrid Threats
- EU Parliament Resolution on Space Capabilities for European Security and Defense
- EU Global Strategy on Foreign and Security Policy
- Space Strategy for Europe
- EU-ESA Joint Statement
- European Defense Action Plan

The EU has committed itself to securing an **autonomous access to space**, providing **security for its space-based assets**, and promoting the adoption of **a voluntary code of conduct in space** (EUGS 2016).

State elements of power:

- **D**iplomacy
- Information
- Military
- Economy



Joint Framework to Counter Hybrid Threats

Action 8: Within the context of the EU Space Strategy and European Defence Action Plan, the Commission will propose to increase the resilience of space infrastructure against hybrid threats, in particular, through a possible extension of the Space Surveillance and Tracking scope to cover hybrid threats, the preparation for the next generation of GovSatCom at European level and the introduction of Galileo in critical infrastructures dependant on time synchronization.



EU Parliament Resolution on Space Capabilities for European Security and Defense

• Stresses that space programs have **security and defense benefits** that are technologically linked to civil benefits and highlights in this connection **the dual-use capacity of Galileo and Copernicus**; believes this capacity **should be fully developed** in the next generations.



• Encourages the Member States to carry out and finalize joint programs and initiatives, such as the Multinational Space-Based Imaging System for Surveillance, Reconnaissance and Observation, the **Government Satellite Communication (GovSatcom)** and the **Space Surveillance and Tracking (SST)** programs, and to pool and share in the area of defense and security, and declares its support for such joint programs and initiatives

EU Global Strategy on Foreign and Security Policy

• In space, we will promote <u>the autonomy and security</u> of our spacebased services and work on principles for responsible space behavior, which could lead to the adoption of an international voluntary code of conduct.

• This requires investing in Intelligence, Surveillance and Reconnaissance, including Remotely Piloted Aircraft Systems, satellite communications, and autonomous access to space and permanent earth observation.

Read the entire document:

EU Global Strategy on Foreign and Security Policy

A Space Strategy for Europe

- The Commission will consolidate EU support for **autonomous access to space.**
- The Commission will **enhance the current EU SST services** and **consider comprehensive space situational awareness services** (such as space weather, cyber alerts). In doing so, it will work to **establish partnerships**, **particularly with the US**.
- The Commission will **propose a Govsatcom initiative** to ensure reliable, secured and cost-effective satellite communication services for EU and national public authorities and infrastructure, and **strengthen security requirements when developing EU space systems.**

Read the entire document:

A Space Strategy for Europe



EU-ESA Joint Statement

- Europe should be able to fully benefit from its space solutions to implement its policies, to **strengthen European** values and **security**, improve knowledge and foster prosperity
- EU and ESA should ensure European autonomy in accessing and using space in a safe and secure environment, and in particular consolidate and protect its infrastructures, including against cyber threats.

Read the entire document:

EU-ESA Joint Statement



Conclusion

Besides reinforcing the existing **Copernicus** and **Galileo** programs and further developing the **GOVSATCOM** concept, the EU should make a significant investment in space security, particularly through boosting its **SST** capabilities and actively working on the international fora to **promote a responsible behavior in outer space** that could be eventually transformed in a voluntary international code of conduct.

Through a comprehensive space policy and by **reinforcing its autonomy in outer space**, the EU will not only strengthen its foreign and security policy, but also **reconfirm its relevant role in global affairs**.

