

## **Satellite Communications**



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Satellite communications (Satcom) are critical elements for defence, security, humanitarian aid, emergency response or diplomatic communications. They are a key enabler for civil and military missions/operations in particular in remote and austere environments with little or no infrastructure. Secure and reliable connectivity in a resilient network is a crucial and strategic asset. Examples of use are the transmission of highly sensitive data or secured satellite links for remote operation of unmanned systems.

Satellite communications are generally split into three categories. The first segment is related to highly-protected and reliable Satcom, provided by sovereign military systems, also known as MilSatcom. The second segment, referred to as GovSatcom, seeks to guarantee assured access by offering resilient and robust security traits, however less protected than the first segment. The third segment, ComSatcom, encompasses satellite communications procured on the commercial market on a pay-per-use basis.

The European Defence Agency's work in the area of satellite communications currently includes two distinctive activities: firstly, it established the **EU Satellite Communication Market**, to pool demand of commercial satellite communications for Member States with the aim to reduce costs, ease access, and improve operational efficiency. Secondly, the Agency assists Member States in the preparation of the next generation of **Governmental Satellite Communication** assets.

## EU Satellite Communication Market

Member States often resort to commercial satellite communications either to complement military capabilities or as the sole means to effectively conduct military operations with appropriate connectivity.

The aim of the Agency's EU Satellite Communication Market is to pool the demand of commercially available satellite communications and related services. This will help to reduce costs, ease access, and improve operational efficiency for Member States and EU operations and missions.

The role of the EU Satellite Communication Market is to act as a booking office to stimulate common procurement between contributing members, based on a portfolio of ComSatcom and related IT services to be contracted by EDA on a pay-per-use basis.

In other words, EDA acts as the central purchasing body on behalf of the contributing members for tailored on-demand ComSatcom services. So far, Austria, Belgium, Finland, France, Germany, Greece, Italy, Luxemburg, Poland, Romania, and the United Kingdom take part in the project, while additional members are welcome and expected to opt in. Awarded in 2012 for three years, the framework contract between EDA and the current service provider allows its contributing members to lease raw-capacity in conventional frequency bands (e. g. C, Ka, Ku, L and X) or to ask for more tailored solutions (e. g. end-to-end connectivity) through dedicated engineering studies. The EU Satellite Communication Market delivered services for over €2.4 million so far. The project was prolonged



by the EDA Steering Board in 2014 for another four years. The Agency expects to sign one or more new framework agreements to cover commercially available Satcom services in the second half of 2015.

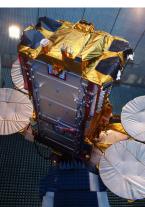
The EU Satellite Communication Market already offers wireless connectivity solutions between European units in theatres and their headquarters. It is the Agency's first example of the Effective Procurement Methods initiative, pooling demand through common off-the-shelf procurement. It primarily serves national needs. With the new setup, CSDP operations and third parties such as Athena could also become contributing members. The project is now open for the civilian community, the European External Action Service and the European Commission service for Foreign Policy Instruments.

## Governmental Satellite Communication: a new capability for 2025

Satcom capabilities are scarce and require significant public investment by Member States. In December 2013, the European Council decided to address critical capability shortfalls through concrete projects supported by EDA. On satellite communications, this is related to the preparation of the next generation of Governmental Satellite Communication through close cooperation between the Member States, the European Commission and the European Space Agency.

The essence of the initiative is to be incremental, by first maximising potential benefits to European actors through the assets available between now and 2025. In the longer term, the development of future governmental capabilities will be considered irrespective of whether they would be best provided through acquisition, service provision or sharing of national resources.





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In this context, EDA gathered the satellite communication needs for European military actors involved in the conduct of national or CSDP operations. These requirements were endorsed by the EDA Steering Board in November 2014. With the active support of the European Space Agency, the European Defence Agency is currently conducting a feasibility study to assess various solutions addressing those needs. By the end of 2016, EDA will provide proposals of a future collaborative programme towards the development of a GovSatcom capability in Europe. Through close cooperation with the European Commission, the European Defence Agency will also foster civil-military synergies so that a common solution can address governmental Satcom demands for security and defence.

The aim of the GovSatcom initiative is to provide its Member States and European actors with appropriate capabilities through an innovative and sustainable cooperation model. It further signals a new partnership not only between military and civil institutional actors, but also with industry in order to better contribute to the competitiveness of Europe.

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