CONNECTING DEFENCE EVERYWHERE

The EDA European Satellite Communication Procurement Cell (ESCPC) and the "Secure Telecom by Satellite" (SECTELSAT) concept for future governmental SatCom...
Satellite Communications and Military Operations

In military operations satellite communications are fundamental for Communication, Command and Control. They also allow operational effectiveness of Intelligence, Surveillance and Reconnaissance platforms, including Remotely Piloted Aircraft Systems (RPAS). Member States often resort to commercial SatCom either to complement more resilient military capabilities or as the sole means to effectively conduct military operations with appropriate connectivity. Five European Member States today operate their own military satellites. The others use commercial solutions. Lessons learnt from recent national and multinational operations have proven that fragmented procurement is not efficient. That’s why the EDA was tasked to set up and run a cell specialised in the common and central procurement of space based connectivity services.

EDA Facilitates Access to SatCom

By launching the European Satellite Communication Procurement Cell (ESCPC), the EDA facilitates access to commercial satellite communication services for its Member States. Initially five nations, France, Italy, Poland, Romania and the United Kingdom, opted to benefit from pooled procurement of commercial SatCom services. Additional states are expected to participate in the near future. Through Astrium Services, with which the EDA has signed a framework contract for a period of three years, the contributing Member States benefit from easier access and reduced costs. Astrium Services serves as the contractual, commercial and operational interface for SatCom operators, providing Member States with commercial bands (C, Ku and Ka).
ESCPC Overview

The satellite communication procurement project has been identified as a Pooling & Sharing priority by defence ministers in November 2011. The role of the ESCPC consists in acting as a booking office to stimulate the common business with contributing Member States, based on a portfolio of SatCom services contracted by EDA on a pay-per-use basis over three years (Q4 2012 – Q4 2015).

ESCPC delivers real services to improve EU defence capability for today’s national and Common Security and Defence Policy missions and operations. It provides a wireless connectivity solution for assets and personnel deployed in Europe or abroad. It may also serve interested third parties such as the EU Satellite Centre, the European Space Agency, and some other EU agencies. It is at the disposal of military forces but can be extended to the civil community of users.

A Reliable Network

- ESCPC provides (multi)point-to-(multi)point **connectivity with:**
  - Metrics: bandwidth (MHz) or data rate (Mbit/s)
- A very large number of satellites in C/Ku/Ka-bands:
  - Over Europe, Africa, Asia, America with **100+ satellites** enlisted
  - Over oceans and regional maritime areas for Navy ships
- Access to major satellite operators:
  - The three “main ones”: **Intelsat, Eutelsat, SES**
  - Many “regionals” Telesat, Arabsat, Hispasat, etc.
ESCPC

Contributing Member States

SATCOM Services
Capacity Requests/Purchase Orders

ESCPC @ EDA
Booking Office

SATCOM Services
Link Budgets/Capacity Deals

SATCOM operators

Others

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ESCPC Benefits

- ESCPC delivers real operational services by connecting European defence everywhere;
- Economies of scale bigger than 10%, depending on the Pooling & Sharing degree;
- Provides the SatCom market with a good visibility of demand instead of fragmented procurement; it gets rid of the "on-the-spot" approach;
- Fundamental tool to support planned and urgent commercial satellite communication requirements;
- Project Arrangement rules elaborated to make ESCPC viable and easy-to-join;
- Opt-in to the project open to more Member States (today) and third parties (future).
Currently, five European nations operate military satellite communication assets: the United Kingdom, France, Italy, Spain and Germany. In the timeframe 2018-2025 all these assets will need to be replaced. This creates a unique opportunity for Pooling & Sharing of military satellite communication which EDA is promoting with its "Secure Telecom by Satellite" (SECTELSAT) concept for a European-wide use of governmental SatCom.
EDA’s Proposal for the Next Generation of Governmental SatCom

EDA is promoting a European-wide approach called SECTELSAT (Secure Telecom by Satellite) that is considering a cross-use of governmental SatCom assets between different actors, while Member States will preserve their sovereignty interests. As a multi-fold Pooling & Sharing scheme, the SECTELSAT concept could be described as:

- **Pooling** future assets with a coordinated approach to collect and harmonise national requirements of EU Member States that operate MILSATCOM, and possibly to pave the way for future cooperative ad hoc programmes;
- **Sharing** future assets once long term requirements of all other EU Member States have been identified, planning MILSATCOM beyond national defence with an enlarged customer basis including the civil community of users (defence and security);
- **Sharing** future assets by offering a new capability package between operating Member States that would be funded by the European Union for its internal networks and its external connectivity needs. This would ensure the transformation process of current MILSATCOM systems into governmental SATCOM infrastructure.

MILSATCOM Today

The five current MILSATCOM systems are mainly individually operated. In times of difficult budget situations, investment in the renewal of the existing systems will be hard to manage for single Member States. This is why the European Defence Agency Steering Board endorsed “Future MILSATCOM” as one of eleven initial Pooling & Sharing priorities in November 2011.

MILSATCOM Tomorrow

While preserving individual national sovereignty interests on nationally operated systems, opening MILSATCOM in an ad hoc Pooling & Sharing scheme potentially allows additional Member States and third parties (EU, NATO) to access these strategic assets. This would add more users and more connectivity that would benefit the national MILSATCOM needs but also provide the EU and NATO with access to resilient SatCom services that NATO currently has, the EU however has not.
More information:
www.eda.europa.eu