

Review of EU GOVSATCOM user needs and use cases



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Introduction

- The ENTRUSTED project aims at establishing a solid Network of governmental Users (NoU) of secure SATCOM services and at setting the scene for a potential future EU GOVSATCOM programme
- Current activities are focusing on:
 - Identifying all potential Users of secure SATCOM services and the respective Use Cases
 - Structuring the Use Cases in different Fields of Application (FoA) to support an efficient specification of the services
 - Reflecting User Needs in a consolidated User Requirements Document



Secure SATCOM User Needs - Background

- In the last years, EU Member States (in coordination with relevant EU entities) have been working in different activities related to secure SATCOM
- The High Level Civil-Military User Needs for Governmental Satellite Communications (HLUN)¹ document was one of the outputs
 - It was developed in cooperation between EU Member States, EC, EEAS and EDA
 - It is now used within ENTRUSTED as reference to advance in the specification of future secure SATCOM user requirements
 - It has been reviewed by ENTRUSTED partners to identify updates and missing points





ENTRUSTED Workflow

HLUN

- User
 Communities
- FoA
- Use Cases
- User Needs





Fields of Application and Use Cases



Long-term R&I roadmap and coordination plan

User Requirement Document

State-of-the-art and future technologies

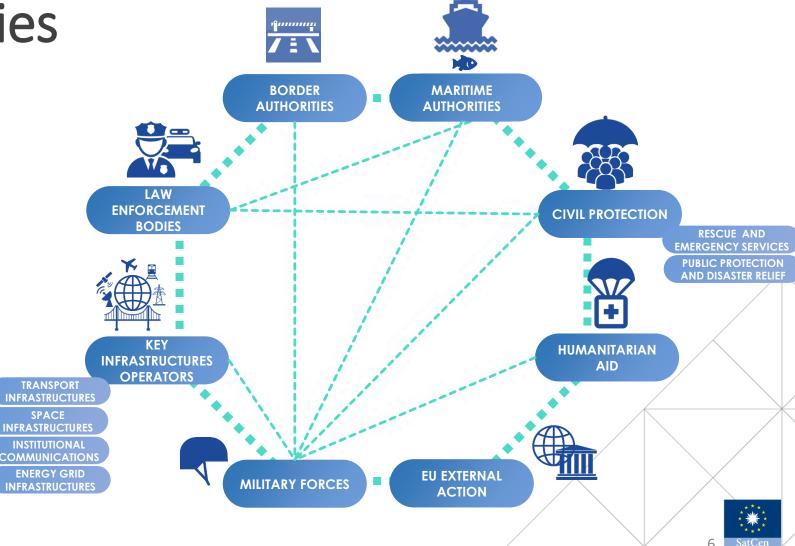
EU stakeholders' programmes





User Communities

- Potential users of GOVSATCOM services are identified from User Communities
- Synergies between communities are present in some cases, depending on the specific use case and country





Fields of Application

 To structure the specification of future services, GOVSATCOM user requirements will be gathered for the relevant Use Cases and grouped by Fields of Application

Surveillance

Crisis Management

Key Infrastructure

Polar regions users

RPAS Beyond-line-ofsight communications

Machine-to-Machine communications and loT

Specific Use Cases (Transversal applications)





User Communities and Fields of Application













EU EXTERNAL

ACTION



MILITARY

FORCES



BORDER AUTHORITIES













Crisis

Management

Surveillance

















Key Infrastructure



V









Surveillance: Use Cases

BORDER SURVEILLANCE & CONTROL

- 01 Sea border scenarios
- 102 Land border scenarios
- O3 Pre-frontier scenarios
- Military operations (CSDP & national missions)

MARITIME SURVEILLANCE & CONTROL

- O1 Safety and surveillance maritime traffic
- Maritime security: Illegal activities
- Maritime security: Fishing activity control
- 04 Military operations





Crisis Management: Use Cases

MARITIME EMERGENCY

- Maritime Search and Rescue (SAR)
- Response to maritime disasters (civil and military)

HUMANITARIAN AID

- Assistance in case of disasters and armed conflicts
- 02 Telemedicine

CIVIL PROTECTION

- Response to natural and man-made disasters
- Ambulance and fire risk rescue response within EU

LAW ENFORCEMENT INTERVENTIONS

- on Fight against international drug traffic
- Fight against international Organized Crime Groups (OCG)
- National police missions within EU

EU EXTERNAL ACTION

- Civilian CSDP crisis management or police operations outside the EU
- 02 Election observation
- 03 Military CSDP missions



Key Infrastructures Operations: Use Cases

TRANSPORT INFRASTRUCTURES

- O1 Air traffic management
- Rail traffic management
- Road traffic management

SPACE INFRASTRUCTURES

- Enhancement of G.S. infrastructures, services and service synergies:
 - Copernicus
 - EGNOS and Galileo
 - EUSST network

Protection and enhancement of Military space infrastructures

INSTITUTIONAL COMMUNICATIONS

Communication services for:

National diplomacy

01

03

04

05

06

- the 139 EU delegations
- The 46 ECHO field offices
- EU High & Special Representatives
- EUROPOL network
- Police routine operations

ENERGY INFRASTRUCTURES

O1 Backup link for energy grid infrastructures



Specific Use Cases for Civil and Military Users

POLAR REGIONS

- Surveillance services
- Diplomatic activity 02
- Protection of space infrastructure 03
- Air Traffic 04 Management (ATM)
- Crisis management 05 missions

RPAS / BLoS COMMUNICATION

- RPAS Command & Control communications
- RPAS sensor data 02 transmission

M2M & IoT COMMUNICATION

- Secure and costeffective M2M communications
- IoT secure 02 applications



User Needs Review

Common Needs

- Guaranteed service provision
- Avoidance of interception and intrusion
- Interoperability and standards

• . . .

FoA common needs

- Required geographical coverage
- Intercommunication needs within different missions in the field
- User terminal needs
- ...

Use Case specific needs



- Type of content and service needed
- Time to activation of service
- User Terminal needs (if specific for the use case)
- . . .



User Requirements

- ENTRUSTED will work in the translation of needs into requirements, with the objective of generating a solid and consolidated URD
- Requirements will be specified to satisfy service user needs and expectations, also considering the GOVSATCOM programme environment (e.g. EU and MS related actions and initiatives)
- The associated requirements will be grouped accordingly to the Fields of Application and associated Use Cases identified, to efficiently address the different services



Way Forward

- ENTRUSTED will launch a survey with the objectives of gathering governmental user requirements for GOVSATCOM to go one step forward in the specification of future services, identifying new use cases, and enlarging the NoU
- Answers will be collected, analysed and processed to generate a consolidated User Requirement Document that will serve as baseline for potential associated developments
- The User Requirement Document will support the identification of key and enabling technologies, and the elaboration of a long-term R&I roadmap and coordination plan to support future activities



Join the Secure SATCOM Network of Users!

How to get in touch:





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