X-Change Gateway for Frontier Security

According to EU Regulation No. 1052/2013 the national command & control centre of a member state shall establish a national situational picture and share it with the EU to enhance the European Situation Picture.

In this scenario:
1. Country A, an EU member state, detects some event (e.g. unauthorised border crossing) at the border with its neighbouring non-EU Country.
2. The information about this event is transmitted to the national command & control centre, which also has operational information about its own assets/mobile units as well as analytical information.
3. The X-Change Gateway facilitates the transmission and adaptation of relevant tactical and operational information between the two neighbouring EU countries concerning the predefined border segment. Frontex/EUROSUR can use the exchanged information to enhance the European Situation Picture.

Integrated Security Solutions

With its portfolio of integrated solutions and services, Airbus Defence and Space offers excellence to customers at every stage of development for border and critical infrastructure security programmes. Whether as sub-systems or as complete nationwide systems, Airbus’ solutions not only ensure surveillance, detection, assessment and decision making but also enable affirmative action in countering threats.
The X-Change Gateway

The X-Change Gateway is an information exchange solution, deployable on secure cloud or physical platforms, to enable a fully digital collaboration of security agencies. It can be applied on existing security systems and provides automated, near-real time information exchange by metadata harmonisation and language translation.

The X-Change Gateway enhances the situational picture of each agency by complementing their own data sets with the shared data, creating statistical reports and by unveiling hidden statistical patterns and data correlations based on AI supported analytics.

Key Benefits
- Seamless and automated information exchange
- Data adaptation to create a consolidated situational picture
- Enhancement of the situational picture by AI based data analytics
- Independent of existing Surveillance Systems
- Independent of existing implementations of National Situation Picture
- Fulfills the provisions of the EU Regulation No. 1052/2013

Key Users
1) Governmental Institutions
   - Border Guards & Police Forces
   - Neighbouring countries interested in joint operations and situation picture sharing
   - EU Agencies
   - Build a common Operational Picture at European level
   - Law Enforcement Agencies
   - Cooperation and information sharing based on predefined dissemination rules

2) Non-Governmental Institutions
   - Private and public Security Agencies
   - Agencies operating in a common environment (e.g. Airport Security) with a need for near-real time event information sharing
   - Joint Headquarters
   - Aggregation of information from multiple agencies and data sources

The X-Change Gateway

Enhanced Collaboration

- Near-real time data exchange
- Metadata harmonisation
- Distribution based on data classification
- Automatic language translation

Enhanced Situational Picture

- Pattern recognition and prediction
- Statistical reports generation and dissemination
- Automated data evaluation
- Anomaly detection