REA and SEREN 3 Secure Societies Info Day and Brokerage Event

CIP:
Critical Infrastructure Protection

SEC/BES:
Border Security and External Security

- DG Migration and Home Affairs

Brussels, 5-6 April 2016
Call - CRITICAL INFRASTRUCTURE PROTECTION

CIP-01-2016-2017: Prevention, detection, response and mitigation of the combination of physical and cyber threats to the critical infrastructure of Europe
The reasoning behind the CIP call

The lines between the physical and the cyber worlds are increasingly blurred. Recent events demonstrate the increased interconnection among the impact of hazards, of the two kinds of attacks and, conversely, the usefulness for operators to combine cyber and physical security-solutions to protect installations of the critical infrastructure of Europe: A comprehensive, yet installation-specific approach is needed.
Exclusive list of CI

- Water Systems,
- Energy Infrastructure (power plants and distribution [in an all-encompassing meaning]);
- Transport Infrastructure and means of transportation;
- Communication Infrastructure;
- Health Services;
- Financial Services.
Scope

- Prevention, detection, response, and in case of failure, mitigation of consequences over the life span of the infrastructure;
- All aspects of both physical and cyber threats and incidents, but also systemic security management issues, interconnections, and cascading effects;
- Sharing information with the public in the vicinity of the installations, protection of rescue teams, security teams and monitoring teams.
Expected Impact

• **Short term:**
  Analysis of physical/cyber detection technologies as well as vulnerabilities.

• **Mid term:**
  Tested solutions to prevent, detect, respond and mitigate physical and cyber threats.

• **Long term:**
  Convergence of safety and security standards, and the pre-establishment of certification mechanisms.
Eligibility criteria

At least 2 operators of the chosen type of critical infrastructure operating in 2 countries must be beneficiaries (possibly, but not necessarily: coordinator) of the grant agreement and should be directly involved in the carrying out of the tasks foreseen in the grant. The participation of industry able to provide security solutions is required.
Technical aspects

- A maximum of one project will be selected per critical infrastructure. Unsuccessful proposals can submit on the second year if the CI is not yet covered.
- The participation of SMEs is strongly encouraged.
- International cooperation in research and innovation is encouraged.
- Indicative budget: €8M per proposal -TRL 7
Call - SECURITY (1)
Border Security and External Security

SEC-13-BES-2017: Next generation of information systems to support EU external policies
SEC-14-BES-2016: Towards reducing the cost of technologies in land border security applications
SEC-16-BES-2017: Through-foliage detection, including in the outermost regions of the EU
SEC-17-BES-2017: Architectures and organizations, big data and data analytics for customs risk management of the international goods supply chain trade movements
SEC-18-BES-2017: Acceptance of "no gate crossing point solutions"
SEC-19-BES-2016: Data fusion for maritime security applications
SEC-20-BES-2016: Border Security: autonomous systems and control systems
Border Security and External Security

Development of technologies, capabilities and solutions to:

Improve EU border security:

- **Flow of people**: research will support the exploitation of the potential given by the European Border Surveillance System (EUROSUR - Regulation No 1052/2013) and promote an enhanced use of new technology for border checks in relation to the SMART BORDERS legislative initiative (DG HOME)

- **Flow of goods**: research will address, in the context of the EU’s customs policy, supply chain security trying to strike the right balance with trade facilitation (DG TAXUD)

Support the EU External Security Policies in civilian tasks (EEAS)
SEC-14-BES–2016: Towards reducing the cost of technologies in land border security applications (1)

Scope:
- EU Border management = enforcement of common policies & implementation of common rules.
- Pressure to process large volumes (and smuggling) of people at border crossing points.
- External land borders of the EU = wide range of challenges
- Without investments in technology and information systems, not feasible to manage borders and border crossing points.
- Broad variety of heterogeneous IT applications and systems deployed.
- This makes management increasingly complex and (too) costly.
- Innovative, cost-efficient technologies needed, or existing ones to become more affordable.
- Border authorities in the best position to identify benefits.

Expected impact:
Novel technologies, tools and systems demonstrating very substantial cost-reduction compared to existing technologies, tools and systems.
SEC-14-BES–2016: Towards reducing the cost of technologies in land border security applications (2)

- Research and Innovation Action
- **Total budget:** €10M
- Ind. Budget per proposal: €5M
- Overlap with EWISA project should be avoided ([www.ewisa.eu](http://www.ewisa.eu))
- Coordination with EDA activities
- Enhanced SME participation
- Up to TRL 6 (technology demonstrated in relevant environment)
- **At least 3 border guard authorities from 3 different EU/Schengen MS**
SEC-19-BES-2016: Data fusion for maritime security applications

**Scope:**

- Develop methods and tools to fuse and make mutually understandable raw data, taking account the technical characteristics of existing systems, and the specific context of the variety of aspects of maritime security.
- Build on existing results, focus on gaps and avoid duplication with previous endeavours.
- For semantic interoperability, the CISE data model [www.eucise2020.eu](http://www.eucise2020.eu) to be used to avoid duplications.

**Expected impact:**

- Improved and extended maritime border situational awareness;
- Improved operational support to search-and-rescue activities;
- Improved border surveillance systems in terms of information exchange, situational awareness, and decision-making and reaction capabilities.

Solutions to be demonstrated in the context of interagency and cross-border cooperation, and to be interfaced with existing infrastructure (systems, platforms and networks of sensors).
**SEC-20-BES-2016: Border Security: autonomous systems and control systems**

**Scope:**

Different prototypes of unmanned vehicles transformed into autonomous, long-enduring agents. Proposals to cover one of the two following sub-topics:

**Sub-topic 1.** Autonomous surveillance to support missions ranging from surveillance to detection of marine pollution incidents, including early identification and tracking of illegal activities.

**Sub-topic 2.** Enhanced command and control systems for the surveillance of borders in a 3D environment.

**Expected impact:**

- Further development of EUROSUR;
- Provision of more information to be exchanged across sectors and borders (as through CISE);
- New technologies for autonomous surveillance systems;
- Improved, cost-effective and efficient unmanned platforms for border surveillance, and detection of marine pollution incidents;
- Adaptation of technologies to the specific requirements of borders control;
- Interoperability with existing, multi-country European infrastructure.
Technical aspects

Type of action: Innovation Action (max €24M)-International cooperation encouraged

SEC-19-BES-2016:

- Coordination with EDA activities
- TRL 7 (system prototype demonstration in operational environment)
- At least 3 border guard authorities from 3 MS/AC
- At least 3 independent industry organizations from 3 different MS/AC.

SEC-20-BES-2016:

- Cover 1 sub-topic:
  1. Autonomous surveillance
  2. Enhanced command and control systems for the surveillance of borders in a 3D environment
- SMEs are strongly encouraged
- TRL 6 or 7
- Practitioners from various disciplines, including Border guard authorities from at least 5 EU/Schengen MS