
Call Title: Security call 4

- Call identifier: **FP7-SEC-2011-1**
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- Indicative budget: EUR 221 million

SELECTED PRIORITY TOPICS:

Activity 10.3 Intelligent surveillance and enhancing border security; *Area 10.3.4 Border checks*

Topic SEC-2011.3.4-2 “Artificial sniffer”- Capability Project

This topic refers to the integration in a one stop shop of different technologies for the detection of illegal substances and hidden persons, border control being closely linked to customs control of goods (this category comprises, inter alia, weapons, drugs, CBRNE, legal goods subject to duty, goods subject to import or export restrictions and those that fail to meet health and safety standards). At the moment, several disconnected devices are used ad-hoc. Dogs are essentially trained (and capable) to detect the presence of one specific substance. The challenge requires mainly technological capabilities for achieving better parallel identification of the elemental, molecular, or biological composition (in order of increasing complexity) features of the material sought after.

If possible, solutions should incorporate a stand-off capability, flexible, fit to be automated, upgradeable, mobile, user-friendly and affordable. The ‘mechanized dog’ should be able to detect in parallel a variety of possible illicit elements, with reliability, high speed of detection and identification, allowing fast threat assessment. The research should focus on exploring the overall process (how to collect odours and store them, what is the best protocol to compare, how to evaluate the performance...). A metric to assess performance should be presented to be validated under operation conditions. This assessment should take place already at the midterm of the project in order to define the best way forward. Existing related research activities have to be properly taken into account.

Expected Impact

- Today many of the sensitive controls are carried at border checks by trained dogs, which cannot be replaced, nor expected to operate on a 24/7 mode.
- The technology should be seen as a complement to them.

Funding scheme: Collaborative Project (small or medium-scale focused research project)

Activity 10.4 Restoring security and safety in case of crisis *Area 10.4.2 Response*

Topic SEC-2011.4.2-3 Rapid deployment of shelters, facilities and medical care resources following a major disaster - Integration Project

Large scale disaster (mainly natural, but also some that are manmade, for example in case of large contamination of the environment) leave large amounts of population homeless, in urgent need for medical assistance and appropriate shelter, safe water and food supply. These disasters (especially when the infrastructure is damaged or poor before the disaster stroke) and the response required pose an enormous logistical challenge. It requires the mobilisation of large quantities of goods, in some cases over large distances in poor and sometimes dangerous conditions. The logistics are, sadly, in some cases the reason for delays in the humanitarian assistance to the people in need. Therefore there is an essential need to develop tools and methods that will speed up the deployment of urgent humanitarian assistance following a large scale disaster. Novel solutions for rapid deployment of medical care facilities and supplies (e.g. medicines, blood, ...), safe drinking water, food and appropriate shelter, to be provided to the people in need within the immediate first days following a large scale disaster. These solutions should focus on situations where logistical capacities and transportation capacities are scarce or badly affected by the disaster.

Expected impact

Novel tools and methods, new emergency response kits that will dramatically scale up the arrival time of emergency supplies to the people in need, in the time frame of hours, following a major disaster.
Funding scheme: Collaborative Project (large scale integrating project)

Activity 10.5 Improving security systems integration, interconnectivity and interoperability

Area 10.5.1 Information Management

Topic SEC-2011.5.1-1 Evaluation of identification technologies, including Biometrics

The main objective is to reinforce the reliability and interoperability of techniques used to identify / authenticate persons. A significant effort is expected on evaluating and perfecting metrics and criteria used for evaluating / validating / certifying identification technologies operationally (for instance by developing specific Protection Profiles using an approach similar to the one developed in the Common Criteria scheme ISO 14508), including biometric technologies often used in identity cards, visa applications and immigration services. This project should look both at the underlying supporting technologies and the identification processes themselves, paving the way to a 'European Identification Certification System' analogue to the Common Criteria scheme. In addition, mechanisms to identify vulnerabilities could be evaluated and integrated in the solution.

Expected impact

To support the development of the proper legal framework (if needed) that fully complies with existing legal requirements, such as respect for fundamental rights, in particular the protection of personal data without endangering the EU legal privacy framework; to increase the industry's competitiveness by allowing them to compete using common standards, to demonstrate to the law enforcement agencies the added value of using

common certified systems within the EU (international) operation; to demonstrate to the citizens that action/progress in this area is possible without building "a priori endangering privacy" systems.

Funding scheme: Collaborative Project (small or medium-scale focused research project) or Coordination and Support Action.