

# **Joint Investment Programme Force Protection**

Signature of the 1st contracts

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**Press Briefing** 

JIP-FP@eda.europa.eu

European Defence Agency Building Capabilities for a Secure Europe



#### **EDA Research and Technology Objectives**

- promote joint R&T aimed at future capability needs
- coordinate and plan joint research activities
- catalyse defence R&T through studies and projects
- manage defence R&T contracts
- liaise with the Commission to maximise complementarities and synergy between defence and security R&T

A prototype: the Joint Investment Programme Force Protection



## JIP-FP: An innovation in Defence R&T EU collaboration

- more effective:
  - Enabling competition
  - Fostering results orientation
  - Building of cross-border networks
- more efficient:
  - Better return on investment
  - Reduced time to result
  - Reduced red-tape



#### JIP-FP – Overview

- 20 contributing Members (cM): AT, BE, CY, CZ, DE, EE, EL, ES, FI, FR, HU, IE, IT, NL, NO, PL, PT, SI, SK, SE.
- Budget of 54.93 Million Euro
- Competition of ideas through calls for proposals
- Evaluation of the proposals involving the end-users
- Addresses: prime contractors, SMEs, research institutes and academia, as well as governmental defence and security research establishments, from the 20 cM.



#### JIP-FP – A Novel Management Approach

- cM joint governance of the programme
- cM have equal rights to use the programme outcome
- Driven by a Management Committee (MC) staffed by cM
- QMV decision making in MC if no consensus reached
- "Global balance" instead of "juste retour"
- EDA services to cM step changed as compared to former frameworks



Covers 18 specific research and technology goals (RTG) grouped under five capability areas derived from the Force Protection aim:

- Collective survivability
- Individual protection
- Secured tactical wireless communication
- Data Analysis including data fusion from various sources
- Mission Planning/Training in an asymmetric environment



Issued in May 2007 to 270 entities. Addresses the capability areas "Collective Survivability" and "Individual Protection":

- Stand off detection of CBRNE, disarming & neutralisation technologies,
- Defence options for airborne threats,
- Scope spotting and sniper detection, notably before the shot,
- Research on new materials for force protection.



Issued in November 2007 to 310 entities. Budget EUR 14 million. Addresses the capability areas "Collective Survivability", "Individual Protection" and "Secured tactical wireless communication systems in urban environment":

- Defence options for airborne threats
- Personal Protection Technology Forecasting
- Robust tactical wireless networked communication
- Intelligent control of adversary mobile phone communications



#### Call 1 Outcome

- 30 proposals received
- Total value: over €100M
- 5 Proposals totalling €12.3M selected
- Selected proposals by subject:
  - C<u>B</u>RNE Detection
  - **CBRNE** Detection
  - Airborne Threats
  - Sniper Detection
  - New Materials

- 1 selected (out of 7)
- 1 selected (out of 6)
- 0 selected (out of 5)
- 2 selected (out of 6)
- 1 selected (out of 5)



### Contract A-0377-RT GC "EPIDARM"

<b>European Protective</b>	Indicative total value:	3.9 Million Euro		
Individual Defence Armour	Duration:	36 months		
OUVRY, LYON (FR) - BLUECHER, ERKRATH (DE) – ONERA, CHATILLON (FR) – ISL, SAINT-LOUIS, (FR) - ENSAIT, ROUBAIX (FR) - RMA, BRUSSELS (BE) – AERO SEKUR (IT)				

EPIDARM deals with R&T on innovative and low cost materials (natural fibres ...) and constructions (use of nano particles, 3D textiles structures ...) and definition of a multifunctional individual ballistic and CBRNE protective system. The system integrates functions like CBRN modular protection, heat stress regulation and medical monitoring. An early integration scheme will enable to reduce the operational capacity shortfalls, to reduce the weight and improve the overall mobility thanks to lighter and more flexible material already developed in the aerospace Industry. The consortium will integrate End Users (especially from FR, BE, IT and DE MoDs). Demonstrators will be defined and manufactured under technical specifications based on the operational requirements. They will be tested in laboratories (as well as the material and sub system level) and fielded in real conditions. The consortium intends to industrialize the results of the project.



#### Contract A-0378-RT GC "GUARDED"

Generic Urban Area	Indicative total value:	3.5 Million Euro
<b>Robotized Detection of</b>	Duration:	36 months
<b>CBRNE</b> Devices		

<u>ECA</u>, ORSAY (FR) - DDSC, ASNIERES-S-SEINE (FR) - ION, INNSBRUCK (AT) - IPS, LJUBLJANA (SI) - ENV, MIKKELI (FI)

The aim of this project is to demonstrate a remote controlled mobile platform for sniffing a suspect and/or dangerous area, having on bard a set of complementary CBRNE sensors to provide a safe diagnostic obtained through data fusion between various sensors, enabling weddings and solving the old paradox of the need for compromising between resolution and detection. Therefore, after a state of the art of various detection techniques allowing to give an overview of what can be detected and how nowadays, use cases scenarios will be established with the help of operational experts to place the project in a realistic context. From then, an intensive trials campaign will conducted. Technologies like Ground Penetrating Radar techniques for localisation, even through walls or buried objects, Proton transfer Reaction coupled with Mass Spectrometry, Chemical and Biological based on handheld devices and improving new sampling techniques etc. will be used. To validate the approach, a trial period is planned after the integration & tests phase, which is traditionally crucial, allowing to point out and measure the effects of the project, i.e. completion of the inspection & securing mission.



#### Contract A-0380-RT GC "MUSAS"

Multi Sensor	Indicative total value:	5.7 Million Euro	
Anti Sniper System	Duration:	30 months	

<u>GMV</u>, Tres Cantos (ES) - Metravib, Limonest (FR) - DS PISA, SAN PIERO A GRADO (IT) - PIAP, Warsaw (PL) - Skysoft, Lisboa (PT) - UoU, Udine (IT)

A sniper is a highly skilled warrior tasked to shoot from a concealed position over longer ranges than regular infantry, and usually shoots at high value. In the recent years, and mainly in asymmetric conflicts, sniper confrontation has proven to be a decisive threat which has to be duly faced. Snipers are used more as a mean to spread terror by indiscriminately shooting even civilian population. Therefore the sniper should be detected before the shooting, but existing techniques have proven to be highly unreliable leading to an unacceptable level of false alarms. The main objective of this proposal is to research different technologies (acoustic and radar sensors, image processing, enhancement of data fusion, inclusion of intelligence information, human machine interface...). Objective is to obtain a real-time reliable estimation of the sniper position before the first shot and disseminate this information in a properly manner optimising the resources for neutralisation. The project will assess different scenarios (military base, convoy and dismounted soldier) and platforms (fixed, wearable, vehicle mounted). It is envisioned to develop a laboratory demonstrator which will show the feasibility of the system and its integration with in future soldier programmes.

