EDA’s approach to European R&T

Pooling & Sharing is not only about quick wins. It will require long-term commitment if Europe is to retain, develop and maximise its capabilities. The capabilities of tomorrow will require investment today. Investment in defence Research & Technology is a key enabler.

However, defence R&T investment has been reduced by 22% over the last five years. Member States collectively allocate slightly over 1% of total defence expenditure to R&T (the Ministerially endorsed benchmark is 2%). Moreover collaborative European R&T is down to 12%, against the Ministerially-endorsed target of 20%.

The overall reduction in investment in defence R&T could have serious implications, including for the technological and industrial base in Europe. This, in turn, could affect Europe’s ability to develop future capabilities. EDA is therefore investigating proposals to stimulate collaborative R&T efforts, notably in the field of technology demonstrators.

Defence R&T, particularly in cutting-edge technologies, has broader implications for innovation, growth, industrial competitiveness and jobs across Europe. Synergies and best use of existing resources at European level need to be developed.

EDA has explored with the European Commission technology-bridging with the security research of FP7 to make best use of resources. This should be extended to and intensified in other civil research and innovation activities in the coming Horizon 2020.

Background

Following up on the 1st EDA R&T Joint Investment Programme (JIP) on Force Protection, European governments agreed, in 2008, to establish a second Joint Investment Programme (JIP) for research into emerging technologies which might have a disruptive effect on the battlefield. Eleven European countries contribute to the initiative, which was funded by a common budget of €15.58 million.

The first JIP on Innovative Concepts and Emerging Technologies (ICET) looked into technologies such as nanomaterials and structures, remote detection and health monitoring.

The contracts launched under the Joint Investment Programme on Innovative Concepts and Emerging Technologies will be completed in 2012, but they can already be considered very successful, since the participating nations have benefited from a good mix of innovation, competition, and on top of that, an excellent return on investment.

The contributing Member States have acknowledged that the JIP-ICET projects (which address 3 technology clusters: "Improved Autonomy", "New Solutions for Materials and Structures", and "Data Capture and Exploitation") have been implemented successfully.

Consortia of defence companies and SMEs, research centres and academia have provided innovative solu-
tions and new ideas that are leading to several follow-on Category B projects. EDA accordingly proposes the establishment of a second programme of the same type, in order benefit from its forerunner and address new technical areas.

The 2nd Joint Investment Project on Innovative Concepts and Emerging Technologies

The European Defence Agency is launching a new cooperative research programme, aimed at fostering the development of new, innovative technologies that have great potential for military capability development. As Joint Investment Programme, the work is expected to lead to technological breakthroughs that will contribute to the achievement of future military capability requirements and improve the competitiveness of European defence industry. EDA JIPs are open to all Member States and countries with an administrative arrangement with EDA.

The technical content of the planned projects cover three areas, namely Environment and human factors, Materials, and Signal processing and Simulation. All technology goals within these wider areas have high potential to lead to further, more focused developments, as in the first programme.

Following the Steering Board decision to launch the programme, a programme arrangement detailing administrative issues will be drafted, with the objective to have it signed after the summer.

The two pictures are from JIP-ICET projects called Novel nanostructured optical components for CBRN detection and high performance opto-microwave links (first page) and Helicopter fuselage crack monitoring and prognosis through on-board sensor network (second page).

The envisaged budget for the ICET 2 programme is some €10m depending on final commitments from Member States.

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