

# MR-137 EU Funding in Security Research

Isabelle Maelcamp Peter Hylton November 2008 MR-137

#### Summary

While most security funding in Europe remains at the national level, a growing number of European Union funding sources do exist. Notably, the EU Seventh Framework Program (FP7) funded by the European Commission, includes a security arm worth €1.4 billion from 2007 to 2013 for multinational consortia, in which American organizations and individuals may participate. Other European Commission programs, such as the Critical Infrastructure Protection program (CIP), also offer funds. While funding opportunities for Americans at the European level remain limited, they do exist and are growing. This report analyzes some of the most prominent sources of funding for security research.

#### The Seventh Framework Program (FP7)

The <u>Seventh Framework Program (FP7)</u> is the main funding source for security at the EU level, and it offers numerous possibilities for participation in security projects. FP7 was launched by the European Commission Directorate General for Research in 2007 and is slated to last through 2013. The recommendations of ESRAB (the European Security and Research Advisory Board), a group of public and private stakeholders meeting until 2007, were very influential in its conception. To achieve its goal of enhancing European research in a variety of areas, FP7 benefits from a  $\in$ 50 billion budget, of which  $\in$ 1.4 billion are devoted to security. This is the first time that an EU budget appropriation of DG Research has been used to finance research in the security area. Four missions define security: security of citizens, security of infrastructure and utilities, intelligent surveillance and border security, and restoring security and safety in cases of crisis.

FP7 provides grants up to 50% of project costs for three different magnitudes of projects. They differ by funding caps, goals, and time span. "Capability projects" are the smallest and shortest, limited to  $\in 2.5$  million in grants and lasting for two to four years. They aim to adapt existing technologies to a specific security purpose. "Integration projects" seek to produce a demonstrable security system, and they can last up to four years and receive up to  $\in 25$  million. Finally, "demonstration projects" are worth up to  $\in 40$  million in grants. They aim to integrate existing security systems into a larger functional unit. The first phase of demonstration projects defines strategic goals over a one-and-a-half-year period, and the second takes up to four years to implement the integrated systems, for a total project timeline of five and a half years.

Projects are publicized through calls for tenders in the EU's Official Journal and on the FP7 website (<u>www.cordis.europa.eu/fp7</u>), and contenders are invited to submit proposals using the online application. Subsequently, a panel of experts examines the various proposals and makes a selection based on the criteria outlined in the <u>Guide for Applicants</u>.

Calls for tenders are open to multinational consortia composed of such legal entities as companies, universities, research centers, and individuals. Each consortium must include

at least three different legal entities located in different EU Member States or associate countries (which are usually candidate countries). When American entities participate, they must do so as part of one of these larger, European consortia. Specific calls for proposals may have additional requirements about the number and origin of consortium partners.

The FP7 website includes a partner service to help organizations find partners. Companies can at no cost advertise their research area on a database in the hope of being chosen by a European partner for cooperation work on FP7 projects. It is also interesting for U.S. researchers willing to find out about European researchers in the same area in order to contact them for possible cooperation. http://cordis.europa.eu/fp7/partners\_en.html

Unfortunately, non-European organizations face several obstacles to qualify for funding for FP7 security projects. To begin, the strategic nature of security projects may make the European Union hesitate to give foreign companies a leading hand in a security project. Furthermore, to receive funding, a foreign company's contribution must be specifically justified in relation to the program's goals, and FP7 funding allocation strongly favors organizations from the EU or from developing countries over those from outside industrialized countries. Because funding is often elusive and the proposal process time-consuming, certain sources recommend conducting a feasibility study before submitting a proposal to ensure that a reasonable chance exists of crafting a winning proposal.

Despite the difficulties, about half of those companies having applied for FP7 projects and which had also participated in the preceding FP6 did manage to receive at least some funding, typically channeled though European subsidiaries. Yet, even in the absence of funding, participation in a project can be advantageous; for example, participation allows a company to influence the development of the research, which will later be commercialized.

The first call for tenders came in 2007 and was valued at €175 million. Of the 44 proposals received, 11 proposals were selected, whose names are listed and linked below.

- 1. Coordinating national research programs and policies on security at major events in Europe
- 2. Developing a crisis communication scorecard
- 3. Security research NCP (national contact points) network phase 1
- 4. Common operational picture exploitation
- 5. Simulation of crisis management activities
- 6. An interoperable approach to the European Union maritime security management
- 7. A new agenda for European security economics
- 8. Security system for maritime infrastructures, ports and coastal zones
- 9. Autonomous maritime surveillance system
- 10. Transportable autonomous patrol for land border surveillance
- 11. Human behavior in crisis situations: a cross cultural investigation to tailor securityrelated communication

The <u>second call</u> for tenders was published September 3, 2008, with a budget of €115 million spanning 30 different topics. The Security theme No.10 is divided in 7 Security Missions:

- 1. Security of citizens
- 2. Security of infrastructures and utilities
- 3. Intelligent surveillance and border security
- 4. Restoring security and safety in case of crisis

Cross-cutting Missions:

- 5. Security systems integration, interconnectivity and interoperability
- 6. Security and society
- 7. Security Research coordination and structuring

The types of projects under this call include, for example, research into:

chemical, biological, radiological, nuclear agents, explosives, bio-dosimetric tools, prevention of terrorist acts and organized crime, B-agent detection systems, logistics, protection of rail, airport and port security, sea border surveillance systems, simulation planning and training tools for crisis management, understanding the drivers underlying violent radicalization processes, UAVs (Unmanned Aerial Vehicles), etc.

Proposals have to be turned in until December 4, 2008 at 17:00:00 (Brussels local time). The "Collaborative project" funding scheme will be divided into integration projects (large-scale projects) and capability projects (small and medium-scale projects). In projects with high risks and for accelerated equipment development in response to new threats, the funding can reach up to 75%. Priorities in this call are on the support of SMEs and end users in the consortia as well as the inclusion of ethical principles. The <u>Security Research Ncp network</u> (Seren) and the <u>NCPs</u> are willing to help to find EU partners. The funding schemes used in this call can be found in the "Guide for Applicants" with a new possibility of funding for "Networks of Excellence", organizations aiming at creating a 'virtual centre of research'.

## About EU Research on defense

This report would be incomplete without a word on research for the defense sector. Currently, there aren't any funds strictly for the defense sector as such from the European Commission budget. The reason is that security is a policy area that belongs to the so-called "pillar one" activities of the EU, so that it is a regulatory policy area for which the EC has competence. Defense, for its part, comes under the "second pillar" of EU activities, that is where the intergovernmental method is applied to the Common Foreign Security Policy (CFSP). But as the frontier between defense and security research becomes increasingly blurred, the benefits from research and innovation under the security program of FP7 will be directly applicable to certain defense capabilities, especially through the development of dual-use technologies. This explains why it is claimed that there are no EU funds for the defense sector, while the EU budget finances research into dual-use technologies such as UAVs for example, that can be used for both security and defense purposes, i.e. as a civil border surveillance tool as well as potentially supporting missile equipment.

# Critical Infrastructure Protection Program (CIP)

The <u>Critical Infrastructure Protection (CIP)</u> program was born in 2006 out a European Commission proposal to create a program to identify and protect critical infrastructure at an EU level. Critical infrastructure includes such areas as transportation, water, communications, and energy. While CIP includes a security-funding budget, opportunities for American participation seem very limited. In 2007, a pilot program was launched with a modest budget of €3 million. However, the project was limited to Member States' authorities dealing with critical infrastructure protection, relevant national and EU research institutions, the owners/operators of critical infrastructures, business/industry associations and standardization bodies, language which seems to exclude the possibility of meaningful American participation.

Supporting the CIP program is another program that the Directorate General for Freedom, Security and Justice operates for "<u>Security and Safeguarding Liberties</u>." The program has a budget of €745 million spread between 2007 and 2013, though responses to calls for tenders are limited to organizations established in the European Union. Therefore, in theory it includes participation of U.S. firms legally established in an EU Member State. Calls for tenders are posted on the following two sites:

http://ec.europa.eu/justice\_home/funding/cips/funding\_cips\_en.htm, http://ec.europa.eu/justice\_home/funding/isec/funding\_isec\_en.htm.

#### ESRIF

Created in 2007, the <u>European Security Research and Innovation Forum (ESRIF)</u> is an influential element of European security funding. ESRIF is a forum of three types of actors: those who will use the results of security research (e.g. police), those who will perform research (e.g. universities), and citizens' groups (e.g. governmental organizations, think tanks). Two thirds of its participants are from the public sector, and 11 different working groups compose ESRIF.

ESRIF aims to enhance public-private dialogue with the goal of advancing a more cohesive market for security technology, services, and research in Europe. It promotes the adoption of common technology approaches. The tangible result of its efforts will be a Joint Security Research Agenda to identify research priorities to EU and national policymakers. While its Agenda is due at the end of 2009, it released a progress report on September 29, 2008: <u>http://www.esrif.eu/documents/intermediate\_report.pdf</u>

#### Frontex and EOS

While not a source for security funding in itself, <u>Frontex</u> is nonetheless important for its influence over security priorities and funding programs. Frontex is an EU agency charged with coordinating external border security among the Member States. It also has a Research and Development Unit, which has influence in EU security research funding; it influences FP7 both as an evaluator of various proposals and as a member of other organizations, like ESRIF. Furthermore, it conducts its own studies to help establish research priorities, and it serves as a liaison between research institutions and Member States.

The <u>European Organisation for Security (EOS)</u> is another potentially influential organization on security funding. It was created in 2007 by private-sector actors in support of ESRIF, with which it shares a goal of developing a more cohesive European security market and policy. Therefore, EOS wields indirect influence over EU security funding choices.

## The European Defence Agency (EDA)

To be complete, this report also includes information on programs from the European Defense Agency, although participation from US firms is not possible at this stage. The mission of the European Defence Agency (EDA) is to improve EU defense capabilities and support the EU's common European Security and Defense Policy (ESDP). As such, it has a modest security research budget funneled through Joint Investment Programs (JIPs). The first was launched in 2007 and lasts through 2010 with a budget of €55 million and a goal of

force protection from threats like snipers and improvised bombs. In May of 2008, a smaller one around the theme of Innovative Concepts and Emerging Technologies (ICET) was created with a budget of €15.5 million and a lifespan of two years.

While information about calls for proposals is posted on the EDA website, calls themselves will be sent only to those organizations who have registered in advance of designated dates as a potential contractor with at least one Member State contributing to the JIP. Furthermore, since the JIPs' budget does not come from the EU budget, but from a limited number of contributing Member States, the allocation of projects and funds are limited to organizations from those states (which does not include the United States) under the "juste retour" principle. More information is available on the sites for Force Protection (http://www.eda.europa.eu/genericitem.aspx?id=184) (http://www.eda.europa.eu/genericitem.aspx?id=368).

#### **Recent Developments**

While the European Commission's Directorate General for Research is not solely concerned with security research, its actions in research will make an impact on security funding. Its most notable 2008 action is a five-pronged series of instruments to encourage the creation of an integrated European Research Area (ERA). The goal is to gradually

decrease research duplication among Member States. The first two proposed instruments were released in the first half of the 2008 and deal with intellectual property and mobility relating to research. The third is a proposal for a <u>regulation</u>, which if approved will lay the foundation for large research infrastructures (European Research Infrastructures, or "ERI"s) composed of several legal entities, such as Member States, third countries, and intergovernmental organizations. The fourth is a communication called "<u>Towards Joint</u> <u>Programming in Research</u>," and it encourages cooperation among Member States' public research institutions on major research projects regarding such issues as climate change and energy. The final element is scheduled for adoption in the fall of 2008 and will propose an international research cooperation strategy.

#### Points to Remember

While most security funding in the European Union is available at the national level, and the opportunities for non-EU organizations remain limited, security funding and participation opportunities are growing at the EU level also. Currently, FP7 concentrates the largest EU effort to finance research in security. Its €1.4 billion security budget is indicative of the trend, and other programs like the Critical Infrastructure Protection program, complement it. In evaluating opportunities in such programs, American organizations should pay close attention to the rules governing participation. It is also useful to be aware of the various actors who influence funding priorities, including Frontex, ESRIF, and EOS.

#### Web Links

FP7; <u>http://cordis.europa.eu/fp7/home\_en.html</u> FP7 proposal submission website; <u>https://www.epss-fp7.org/epss/welcome.jsp</u> FP7 in brief; <u>http://ec.europa.eu/research/fp7/pdf/fp7-inbrief\_en.pdf</u> EDA; <u>http://www.eda.europa.eu/default.aspx</u> ESRIF; <u>http://www.esrif.eu/</u>

EOS; http://www.eos-eu.com

Frontex; <u>http://www.frontex.europa.eu/</u>

Our Market Research Report on FP7. For access, please follow the request procedure as indicated;

http://www.buyusa.gov/europeanunion/summary\_one\_one\_zero.html

*Guide for Applicants*; <u>http://erc.europa.eu/pdf/ERC\_Guide\_for\_Applicants.pdf</u>

European Research Area summary; <u>http://www.euractiv.com/en/science/era-</u> european-research-area/article-117488

SecurityCommunity: <u>http://www.securitycommunity.eu/</u> Think tank with many references to EU policy documents, dossiers folders and agenda of security research conferences.

EC DG Enterprises: Homepage on security research;

http://ec.europa.eu/enterprise/security/index\_en.htm

# For More Information:

The U.S. Commercial Service at the U.S. Mission to the European Union is located at Boulevard du Regent 27, Brussels BE-1000, Belgium, and can be contacted via e-mail at: <u>brussels.ec.office.box@mail.doc.gov</u>; or by visiting the website: <u>www.buyusa.gov/europeanunion</u>.

One can locate the nearest U.S. Export Assistance Center or Commercial Service offices throughout Europe by visiting <u>www.buyusa.gov</u> and <u>www.buyusa.gov/europe</u>.

To the best of our knowledge, the information contained in this report is accurate as of the date published. However, The Department of Commerce does not take responsibility for actions readers may take based on the information contained herein. Readers should always conduct their own due diligence before entering into business ventures or other commercial arrangements. The Department of Commerce can assist companies in these endeavors.

INTERNATIONAL COPYRIGHT, U.S. DEPARTMENT OF COMMERCE, 2008. ALL RIGHTS RESERVED OUTSIDE OF THE UNITED STATES.