COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

on Public-Private Dialogue in Security Research and Innovation

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Introduction

The security threats facing Europe are multifaceted, interrelated, complex and increasingly transnational in their impact and in that internal and external security are increasingly inseparable\textsuperscript{1}. No single Member State can achieve security alone. Nearly nine in ten European Union (EU) citizens believe that security questions should be dealt with not just at national but also at EU level\textsuperscript{2}. In this context, one of Europe's main objectives is to preserve its values of open society and civil liberties while addressing the increased security threat. At the same time, Europe must secure its economy and its competitiveness against an increased threat of disruption to its basic economic infrastructures, including industrial assets and transport, energy and information networks.

Implementing an efficient policy for security in Europe demands a comprehensive set of instruments covering law enforcement, intelligence, judicial, economic, financial and technological aspects. In a constantly changing and increasingly technological world, guaranteeing security without the support of knowledge and technology is almost impossible. Security research and innovation provide practical measures and solutions to support policy implementation. Novel security solutions should provide ways to increase the security of our citizens without imposing additional unnecessary burdens on their daily lives.

Technology makes it easier to detect dangerous materials being traded. The same applies to border controls, to prevent illegal immigrants, traffickers of human beings, drug traffickers and terrorists taking advantage of the fact that internal border controls have been lifted within the Schengen area. Innovative and sophisticated solutions and systems will help avoid fraud on identity documents, inter alia through biometrics in visas, passports, residence permits and other documents.

The Commission has increased substantially the resources dedicated to security research and innovation. The 7\textsuperscript{th} EU Framework Programme for Research and Technological Development (FP7) has a strong security theme for developing the technologies needed to ensure the security of citizens from threats such as terrorism and crime, natural disasters and industrial accidents, while respecting fundamental human rights and considering societal aspects. It will also help structure and coordinate European and national research efforts. The Justice, Freedom and Security financial Framework programme "Security and safeguarding Liberties" is concerned with operational co-operation and policy oriented studies in the field of prevention and the fight against crime and terrorism. Public investment is fundamental for the

\textsuperscript{1} The Commission will further analyse the extent and the modalities how results of activities carried out under this Communication can help and complement the external action policies and relevant instruments. The Commission is currently preparing a Communication on better coordinating the EU's external assistance role in security.

security sector. End users of security applications and technologies will often be the public and government organisations. The public sector in general needs to be more actively involved in developing a structured and efficient security market.

The private sector also has an important role to play: developing appropriate security capabilities requires a strong and competitive industrial base, which itself depends on pinpointing the needs of customers for whom new products, systems and services are created. There are a number of cross-cutting policy issues that need to be addressed with a view to developing such a competitive industrial base and meeting the security needs of the public sector and of citizens. This includes improving the way systems operate together and interconnect, mainly by developing common standards, exchanging best practice and contributing to the reflection on improving procurement processes, coordinating European and national security research programmes, promoting SME involvement in the supply chain, involving the end-user and formulating an international co-operation strategy.

Developing and implementing an effective security research strategy therefore requires the participation of all relevant stakeholders in the private and the public sectors, both at national and European levels.

In this context, the specific policy objectives of the Private-Public Dialogue in Security Research and Innovation are:

- to bring together all the relevant stakeholders in order to discuss issues of cross-cutting, common concern, facilitate the assessment of their differentiated strengths and resources, identify areas for potential synergies; or joint programming;

- to identify proposals for forming a strategic security research and innovation agenda, involving national and European stakeholders, laying out a shared and clear view of European security research needs and priorities;

- to share ideas, views and best practices in order to make better use of existing capabilities and to enhance the use of technology in security-related domains, e.g. by inter alia making the best possible use of the various funding instruments in the present financial programming period.

The Commission expects that the creation of a forum for the development of a Public-Private Dialogue (PPD) in the area of EU security research and innovation will be the key instrument for achieving these objectives. This European Security Research and Innovation Forum (hereinafter ESRIF) is intended to build on the work already done by the Group of Personalities and the European Security Research Advisory Board (ESRAB).

3 The ‘Group of Personalities’ (GoP) was set up in 2003. In its final report (Research for a Secure Europe: Report of the Group of Personalities in the field of Security Research, 15 March 2004, http://ec.europa.eu/enterprise/security/doc/gop_en.pdf.), the GoP recommended the launch of a security research theme in FP7 with a minimum threshold of € 1 billion per annum as well as the creation of the ‘European Security Research Advisory Board’ (ESRAB).

4 The ESRAB Board was created by Commission Decision 2005/516/EC on 22 April 2005 and published its final report on 22 September 2006. It recommends that multidisciplinary mission-oriented research should be undertaken. It should combine end-users and suppliers in project definition and execution. The report identified a number of areas to stimulate innovation and improve the use of research in procured products and services. Finally, the ESRAB report also suggested ‘the creation of a European Security Board, to foster greater dialogue and a shared view of European security needs. The board
The aim of this Communication is to underline the principles of a European security research agenda and highlight the importance of a solid public-private dialogue in the field of European security research and innovation. It seeks to create a foundation for mutual trust and pave the way for closer integration of security-related Community initiatives.

1. **The need for a shared and clear view of European security research needs and priorities**

   The European Union has responded to the need for more security research with two seven-year Framework Programmes in the area of Security, with a total funding of €2.135 billion over the 2007-2013 period. These are the FP7, which includes a Security theme, and the EU Framework Programme on ‘Security and Safeguarding Liberties’. A coherent approach between these two programmes is being pursued, to ensure crossover between the different types of research activities. Two types of security activities can currently be distinguished:

   With a budget of €1.4 billion, the Security theme of FP7 aims to develop the technologies to build the required capabilities for protection against terrorism and crime, border control, critical infrastructure protection, and crisis management. The Security theme was based on the recommendations of the ‘Group of Personalities’ (GoP) and the ‘European Security Research Advisory Board’ (ESRAB). ESRAB was already based on a Public-Private Dialogue philosophy, which included end users, and helped formulate the research activities under FP7. It is a follow-up to the three-year “Preparatory Action in the field of Security Research” (PASR) launched by the Commission in 2004 with a total budget of €45 million.

   Significant activities in the area of Security research are also taking place within the Information and Communication Technologies (ICT) theme of the FP. Under FP6 the budget for ICT Security research amounted to €150 million and €90 million have already been earmarked for the first two years of FP7.

   Security-related activities are now covered by the Framework programme on ‘Security and Safeguarding Liberties’ that encompasses two specific programmes, namely:

   – Prevention, Preparedness and Consequence Management of Terrorism and other Security related Risks

   and

should bring together, in a non-bureaucratic manner, authoritative senior representatives from the public and private communities to jointly develop a strategic security agenda and act as a possible reference body for the implementation of existing programmes and initiatives.

5 A framework programme bundles different EU financial programmes related to a particular theme together under a common umbrella.


7 The 2006 ESRAB report recommends that multidisciplinary mission-oriented research should be undertaken. It should combine end-users and suppliers in project definition and execution. The report identified a number of areas to stimulate innovation and improve the use of research in procured products and services.
– Prevention of and Fight against Crime.

The planned 2007-13 budget for these programmes is € 745 million.

Policy-oriented, shorter-term studies have been carried out within the funding instruments available to security policies. This has included, in the past, the AGIS Programme, which supported cooperation between law enforcement organisations, the judiciary and professionals from EU Member States, and candidate countries, on criminal matters and in the fight against crime. It ran from 2003 until the end of 2006 with a budget of some € 59 million.

- International cooperation

European Security Research has a global context, which means that Europe must be open to dialogue with third countries in the field of security research and innovation.

FP7 provides for the enhanced participation of researchers and research institutions from all International Cooperation Partner countries and industrialised countries, with restrictions on certain confidentiality aspects.

In addition, legal entities from Associated Countries can participate in FP7 security research with the same rights and obligations as for the Member States\(^8\).

The inclusion of third countries will bring in different views and ensure coherence between the Joint Security Research and Innovation Agenda and security research activities in other parts of the world.

\[\text{The entry into force of the two EU Framework Programmes substantially increases resources dedicated to security and security research and will strengthen co-operation and synergies.}\]

2. **Security research promoting an EU area of Justice, Freedom and Security**

One of the main objectives of the EU’s security policies is to prevent, detect, respond to and recover from security threats to the EU territory, population or critical infrastructures. The EU is conducting a number of security-related activities across different policy areas such as justice, freedom and security, research, transport and energy, information society, environment, health and consumer protection and external relations. Whilst protecting EU citizens' right to security, the Union promotes and protects the freedom to work and travel around the EU, the rule of law, freedom of speech and association, the right to privacy and data protection and the right to a fair trial. Security research can contribute to safeguarding both security and data protection. A public-private dialogue in the field of security research could be particularly relevant in the following areas.

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\(^8\) The nine current FP7 Associated countries are: Croatia, Former Yugoslav Republic Of Macedonia, Iceland, Israel, Lichtenstein, Norway, Serbia, Switzerland and Turkey.
- **Increasing the security of infrastructures and utilities**

The challenge is to protect critical infrastructures and utilities systems from being damaged, destroyed or disrupted by deliberate acts of terrorism, natural disasters, negligence, accidents or computer hacking, criminal activity and malicious behaviour. Efficient technological solutions need to be developed. On 12 December 2006, the European Commission adopted a Communication on a European Programme for Critical Infrastructure Protection (EPCIP)\(^9\) and a proposal for a Directive on the identification and designation of European Critical Infrastructure.

- **Organised crime and terrorism**

In order to uncover and track terrorist and organised crime activities secure means for the exchange of information and funds must be developed. These include secure communications and policing of information infrastructures, i.a. the internet. Concerning terrorist weapons, detection, tracking, tracing, identification and neutralisation of CBRNE (Chemical, Biological, Radiological, Nuclear substances and Explosives) and Radio Frequency weapons are the priority. Public and private operators must work to increase the security of legitimately manufactured explosives, to prevent terrorists from using improvised explosives. The Commission will soon adopt an EU Action Plan for the safety and security of explosives and detonators.

- **Security and society**

Technology is an important tool in preventing, responding to, managing and mitigating potential security threats to European societies. But it only works in combination with organisational arrangements and human intervention. Thus, research into political, social and human issues is required to complement technology-oriented research.

Data-processing systems are designed to serve citizens. They must, whatever the nationality or residence of the persons, respect their fundamental rights and freedoms, notably the right to privacy, and contribute to economic and social progress, trade expansion and the well-being of individuals. Future technological developments should enhance the protection of personal data and privacy, whilst providing the means for transparent and accountable law enforcement. In this regard, the development of privacy-enhancing technologies\(^10\) is an avenue to pursue in public-private dialogue.

- **Intelligent surveillance and enhancing border control**

Border security must be addressed in the context of integrated border management ensuring legitimate trade and movements of people, thus supporting the Schengen system, the efforts of national authorities and those of the European Union’s external borders agency FRONTEX. The convergence of information management systems, interoperability, training and cascading best practice must continue. The link to standardisation, regulation and legislation and to related testing, evaluation and

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certification is crucial. With respect to illegal immigration, the objective is to develop novel, reliable and flexible solutions to identify illegal movements, whilst not unduly impeding the flow of the vast majority of legitimate travellers and vehicles.

With respect to the trafficking of drugs, weapons and illicit substances, the objective is to disrupt networks, while addressing traceability, security of goods supply chains and logistics networks standardisation, and more affordable robust solutions as well as seeking ways of reducing unit cost and screening times.

Current technology limits the surveillance on certain parts of the external border, e.g. coastal areas, and is not suitable for the detection and tracking of small vessels, which are used for smuggling people, drugs etc. into the Schengen area. Research and technological development should focus on technical tools for surveillance (e.g. Unmanned Aerial Vehicle (UAVs), satellites).

- **Restoring security in a crisis**

We must ensure that governments, emergency services and societies are better prepared to cope with unpredictable catastrophic incidents using new, innovative and affordable solutions. The challenge is also to improve the tools, infrastructures, procedures and organisational frameworks for responding and recovering more efficiently and effectively, both during and after an incident.

3. **THE COMPETITIVENESS OF EUROPEAN INDUSTRY IN THE SECURITY RESEARCH AREA**

The security market is a complex and heterogeneous market with civil and defence applications. Security technologies and solutions are intrinsically part of, and developed within, a wide array of industries covering e.g. transport, energy, environment, information society, telecommunication, health. This will also enable SMEs to become involved in the emerging security market.

Security technologies and solutions are themselves diverse and cover such elements as positioning, authentication, identification, risk assessment, and situation awareness. An effective industrial policy to support the security market should include regulation, standardisation, access to venture capital, and a coherent research strategy and sustained funding.

Standardisation, conducted in accordance with the relevant competition rules\(^\text{11}\), has proved to be an effective tool for the coherent and effective implementation of European legislation across a variety of EU policies.

Standards are efficient tools for all relevant stakeholders, including the public sector in its capacity as purchaser of goods and services, as they deliver inter-operability and durability to meet end-user requirements. As a procurement tool, standards are a key element in market creation in the security domain at European and international level.

The European Standardisation Office, CEN, has set up a working group on ‘Protection and Security of the Citizen’ (BT/WG161), focusing on:

- the coordination of standardisation activities in this area, notably with ISO;
- possible new standardisation activities;
- responding to stakeholders' queries, in particular from the EU Institutions.

ESRIF can help identify priority areas for standard-setting at European level, taking into account the need for standards to be accessible for SMEs. ESRIF should also map the whole civil security technology supply chain and analyse the economics of security, promoting initiatives to identify and set quantifiable targets.

A Joint Security Research Agenda involving all public and private European stakeholders, from both the supply and demand sides, and which is user-driven, will create opportunities for more coherent research programming and funding that should lead to better innovation. It should also trigger the investment of funds by the private sector in the research strategic priorities, thereby complementing the public investment. Moreover, it corresponds to the general aim of building a true European Research Area, notably by promoting better coherence between investments in research and development allocated at national, regional and European levels. This will ultimately strengthen the EU security market and the competitiveness of industry and other providers of technologies and solutions.

A stronger and more coherent Security market will contribute to growth and support the Lisbon process.

4. A NEED TO CONNECT SECURITY RESEARCH WITH PUBLIC AND PRIVATE STAKEHOLDERS

There are a number of issues that need to be addressed here:

- **The dialogue between demand for and supply of security technologies and solutions** needs to be strengthened, in order to obtain a shared and clear view of European security research needs and priorities.

- The resources for security research are scattered between **European, national and regional levels as well as public and private stakeholders**: good coordination will help to make optimum use of existing capabilities and increased exchange of information to avoid unnecessary duplication and to enhance cooperation, e.g. on cross border issues such as airport-security, detection of liquid explosive, etc.

- There is a need for enhanced international co-operation in certain areas.

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– There is a need to co-operate with European bodies such as the Europol, FRONTEX, European Defence Agency as well as international organisations (e.g. UNICRI).

– Synergies between the different elements of European security (policy, implementation, standardisation, research, and other related activities) at European and national level must be enhanced.

– End-users are sometimes only involved in the late stages of research projects: research should be multi-disciplinary and involve end-users and suppliers right from the start.

– The dissemination of and exploitation of research results must be improved.

– The availability of and access to good-quality research at EU level should be improved.

– Research in the field of security will lead to the development of new systems and processes. Take-up of these will be promoted by the development of European standards for which standardisation mandates should be issued to the European Standards organisations where appropriate.

– These objectives should be clearly set out in a roadmap and given high political endorsement and visibility.

The use of existing databases such as CORDIS – Community Research & Development Information Service (http://cordis.europa.eu) will rapidly enable the support of the objectives of ESRIF to exchange ideas, disseminate information and promote research results.

Security research can make a significant contribution to the Growth and Jobs agenda, since European industry has the opportunity to become a major player in the global security market.

There is a need to bring together the demand and supply sides of technologies and solutions, the EU institutions and the Member States in order to address a number of specific security research issues and problems.

5. JOINING FORCES: CREATING THE EUROPEAN SECURITY RESEARCH AND INNOVATION FORUM (ESRIF)

1. Mission and objectives

– The objective of the ESRIF is to support civil security policy-making with the appropriate technology and knowledge base by establishing and carrying forward a mid- and long-term Joint Security Research Agenda that will involve all European stakeholders, including those from the Associated countries to FP7, from both the supply and the demand sides, industry and academia and other. This agenda should contain a research roadmap based on the future needs of the public and private end-users and the state-of-the-art security technologies. Its implementation should be closely followed-up by all stakeholders. By bringing
together the supply and demand sides of security research, the forum is intended to ensure that research is relevant and that it feeds into security policy-making. It is also expected to serve to create a common basis for research activities, particularly through national and EU programmes. The role of the ESRIF will be solely consultative. This is in line with the ESRAB recommendations.

The ESRIF is expected to develop its activities in full compliance with fundamental rights, in particular with the protection of personal data and whilst respecting the security provisions of Commission Decision 2001/844/EC, ECSC, Euratom (including 2006/548/EC, Euratom on industrial security).

- More specifically, the objective is for ESRIF to assist the European security sector by:
  - strengthening and highlighting the importance of a public-private dialogue in the field of European security research, bringing together the demand and supply sides of security technologies, showing new perspectives for the use of technologies and creating an atmosphere of mutual trust and cooperation;
  - encouraging innovative thinking to tackle the emerging threat and to encourage the development of future opportunities and advances in science, technology and other fields (sociology, culture, economics, etc.);
  - continuously analysing the future security capability needs in light of existing and future threats, based on systematic vulnerability assessments and of the supply side capabilities to deliver the relevant technologies and solutions. In appropriate cases this should also lead to the definition of common user needs (both public and private);
  - promoting the integration of the full innovation supply chains throughout Europe (end-users; research community; industry including SMEs). It will be vital to establish effective technology watch mechanisms in order to integrate the most appropriate cost efficient technologies in security solutions.

2. Structure

The ESRIF will be set up in agreement with the Member States and organised by its stakeholders.

It will have a single **plenary** with a balanced representation of all stakeholders in security research, from the public and private sectors, i.e. industry, research establishments, public and private end-users, civil society organisations, European institutions, in particular the European Parliament, and European organisations\(^\text{13}\).

A number of **working groups** will be defined by the ESRIF after its constitution and will involve an estimated total of 200-300 contributors, with smaller ad-hoc groups to take forward particular activities;

\(^{13}\) The initial members of the Forum have been proposed by the Member States and Associated Countries following a formal invitation by the Commission.
A group may be created to accompany the process at political level at specific stages, in particular for the preparation of the final ESRIF report.

**The European Security Research and Innovation Forum will have the aim of formulating an EU Joint Security Research Agenda, and following-up its implementation. It will also contribute to the European public debate on the issues of security, technology and innovation.**

6. **CONCLUSIONS AND KEY ACTIONS**

1. A solid public-private dialogue in the field of European security research and innovation is capital to ensuring mutual trust amongst all the relevant stakeholders. It would provide a sound basis for ensuring long term security solutions for the benefit of EU citizens.

   The main instrument for achieving these objectives should be a forum for the development of a Public-Private Dialogue (PPD) in the area of EU security research and innovation, the ESRIF.

2. The ESRIF's inaugural meeting is planned for September 2007, and it is expected to be fully operational later in the year. It will be established for a limited period of time, i.e. until the end of 2009.

3. The Commission will participate actively in the proceedings of the Forum. The ESRIF will report on progress achieved in 2008, and the Commission will take stock of these first results and react with a Communication in the autumn of 2008.

4. The ESRIF is to present a Joint Security Research Agenda towards the end of 2009. It will contain, where appropriate, recommendations to public authorities.

5. The ESRIF is to become the first step in a Public-Private Dialogue process which is intended to link Security stakeholders in a more permanent and structured way.
ANNEX

The Security theme under FP7 and security activities under the EU Framework Programme on ‘Security and Safeguarding Liberties’

1. In March 2004, the Commission launched a three-year “Preparatory Action” in the field of Security Research. With three annual budgets of €15 million, the Preparatory Action was a first step towards the Security theme of FP7.

Participants included companies in the aerospace, information & communication technologies, system integrators and defence sectors. Under the Preparatory Action, 39 projects have been launched covering the areas of situation awareness, protection of networked systems, protection against terrorism, crisis management and interoperability of control and communications systems.

The Security theme in FP7 will develop the technologies for building capabilities needed to ensure the security of citizens from threats such as terrorism and crime, natural disasters and industrial accidents, while having due regard for fundamental human rights and societal aspects. It will also be an instrument to structure and coordinate European and national research efforts. Its budget is €1.4 billion over seven years (2007-2013).

The Security theme work programme is based on the ESRAB report14. It is structured on the basis of four security missions of high political relevance which relate to specific security threats.

Missions:

(1) Security of citizens
(2) Security of infrastructures and utilities
(3) Intelligence surveillance and border security
(4) Restoring security and safety in a crisis

Three domains of cross-cutting interest were selected as well:

Cross cutting:

(5) Security systems integration, interconnectivity and interoperability
(6) Security and society
(7) Security research coordination and structuring

14 The ESRAB Board was created by Commission Decision 2005/516/EC on 22 April 2005 and published its final report on 22 September 2006.
The governance of the FP7 Security theme is organised in close cooperation between Member States’ authorities and the Commission. On this basis, mutual information on national security research activities and results can be exchanged and common strategies developed.

2. The EU Framework Programme on ‘Security and Safeguarding Liberties’

AGIS (2003-2006) was set up to help legal practitioners, law enforcement officials and representatives of victim assistance services from the EU Member States and Candidate Countries to set up Europe-wide networks, as well as to exchange information and best practices. It also aimed at encouraging Member States to step up co-operation with applicant and third countries.

The EU Framework Programme on ‘Security and Safeguarding Liberties’ (2007-2013) consists of two financial instruments encompassing the following specific programmes: "Prevention of and Fight against Crime"\(^\text{15}\) and "Prevention, Preparedness and Consequence management of Terrorism and other Security related risks"\(^\text{16}\).

### Budget 2007-2013

<table>
<thead>
<tr>
<th>Framework programme: Security and safeguarding Liberties</th>
<th>Total amount over the 2007-2013 period</th>
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<tbody>
<tr>
<td>Including:</td>
<td>€ 745.00 million</td>
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<tr>
<td>- Specific programme: Prevention of and fight against crime</td>
<td>€ 597.60 million</td>
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<tr>
<td>- Specific programme: Prevention, Preparedness and Consequence Management of Terrorism and other Security related risks</td>
<td>€ 137.40 million</td>
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As a follow-up to AGIS, the framework programme is concerned with effective operational co-operation in the fight against, and prevention of, crime and terrorism.

The objectives of the **Specific programme: Prevention of and fight against crime** are:

(a) to stimulate, promote and develop horizontal methods and tools necessary for strategically preventing and fighting crime and guaranteeing security and public order, such as the work carried out in the European Union Crime Prevention Network, public-private partnerships, best practices in crime prevention.

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\(^{15}\) Council Decision 2007/125/JHA of 12 February 2007 establishing for the period 2007 to 2013, as part of General Programme on Security and Safeguarding Liberties, the Specific Programme ‘Prevention of and Fight against Crime’.

prevention, comparable statistics, applied criminology and an enhanced approach towards young offenders;

(b) to promote and develop coordination, cooperation and mutual understanding among law enforcement agencies, other national authorities and related Union bodies in respect of the priorities identified by the Council, in particular as set out by Europol's Organised Crime Threat Assessment;

(c) to promote and develop best practices for the protection of and support for witnesses;

(d) to promote and develop best practices for the protection of crime victims.

The objectives of the **Specific programme: Prevention, Preparedness and Consequence Management of Terrorism and other Security related risks** are to stimulate, promote and develop measures on prevention, preparedness and consequence management based, *inter alia*, on comprehensive threat and risk assessments, subject to supervision by Member States and with due regard for existing Community competence in that matter, and aiming to prevent or reduce risks linked with terrorism and other security related risks.

The most recent examples of research projects financed by AGIS include:

- Police Detention in Europe: a comparative study of the provision of services for problematic drug and alcohol users

- Implementation study for an international child sexual exploitation image database

- Optimisation of methods for identifying persons in photographs (photo identification): a contribution to combating and preventing crime in Europe

- Study on Corruption within the Public Sector

- Cyber crime Investigation (developing an international training programme for the future / delivering an intermediate level accredited modular international training programme (two projects)

- Training in efficient amphetamine comparison using a harmonised methodology and sustainable database.

Calls for proposals for action and operating grants are regularly published for these specific programmes. Information is available at:

http://ec.europa.eu/justice_home/funding/intro/funding_security_en.htm