



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 11.9.2007
SEC(2007) 1138

COMMISSION STAFF WORKING DOCUMENT

Accompanying document to the

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT AND THE COUNCIL**

on Public-Private Dialogue in Security Research and Innovation

Impact Assessment

{COM(2007) 511 final}
{SEC(2007) 1139}

This version of the Impact Assessment takes on board the recommendations contained in the opinion of the Impact Assessment Board in the following way:

- (1) The problem definition is now only focusing on the fragmentation of security research efforts in the EU. This is indeed the main problem we want to remedy by setting up the European advisory board ESRIF. The lack of funding is a secondary problem and has therefore been deleted from the problem definition.
- (2) The two sub-options for establishing ESRIF, including the analysis of impacts, have been further elaborated, in particular the two sub-options of option 3.

In addition, we indicated that the creation the board without a Commission decision is desirable in terms of subsidiarity. This has been further explicated under the impact analyses and under the section on policy options.

Background/Context

For the first time, the 7th EU Framework Programme for Research and Technological Development (FP7) comprises a special theme on Security research, while several financial programmes in the Justice, Freedom and Security area in the period 2007-2013 will finance short-term, operational and policy oriented activities, including research. Moreover, several EU Member States have developed and launched their own complementary national security research programmes. In this context, from discussions with Member States and FP7 Associated Countries, representatives of the European Parliament, industry and research establishments, the need to establish a strategic platform to carry forward security research in Europe and to link it to European security policies and their implementation, has emerged.

As a result, the creation of a “European Security Research and Innovation Forum” (ESRIF) was announced at the “2nd European Conference on Security Research” (SRC’07) in Berlin on 26 March 2007 by the German Minister for Education and Research, Ms. Annette Schavan and Commission's Vice Presidents Günter Verheugen and Franco Frattini.

The ESRIF should bring together, on a voluntary basis, all relevant stakeholder groups from the demand and supply sides of security technologies and solutions. It would have a consultative role and should develop a Joint Security Research Agenda according to the needs and priorities of security policy makers and implementers to become the reference document for security research programming on European and national levels. Through its operations, the ESRIF should at the same time enhance public-private dialogue in the field of European security research and increase transparency and coordination between the various ongoing programmes and initiatives.

DG JLS planned in the CLWP 2007 a Communication covering Private Partnership in the field of European Security.

DG ENTR planned in its 2007 agenda the creation of ESRIF, the European Security Research and Innovation Forum.

It was decided to merge both actions. Given the complementary nature of the security related activities in JLS and ENTR, it will lead to greater coherence of EU actions in this domain.

Compared to the original Commission (JLS) planning to issue a Communication covering Private Partnership in the field of European Security (Option 2), it was decided to concentrate on Security Research for different reasons. Legal instruments and budgets exist at EU level: FP7 (2007-2013) with a budget line of € 1.4 billion for the security research theme and the Framework Programme for Security and Safeguarding Liberties (2007-2013) with € 735 million.

Research is a less-controversial upstream activity where the Community', the MS' and Industry's co-ordination activities can yield results in a short to medium time frame.

It also allows for greater consistency by merging the JLS initiative with the one prepared by ENTR. Two Communications on such similar topics might have led to duplication of work and efforts.

Sub-option 3b (the creation of the ESRIF forum without a Commission Decision) is preferred over 3a (creation of ESRIF via a Commission Decision). It is felt ESRIF should not be set up via a Commission Decision in order to preserve its independent advisory nature and the neutrality of the Commission.

The creation of ESRIF has been advocated in one of the conclusions of the final report of ESRAB, the European Security Research and Advisory Board, delivered after more than one year of work¹. ESRAB was composed of high level persons from public authorities, industry, research organisations, civil society organisations and European institutions.

If ESRIF is created, a second Communication accompanied by a more substantial Impact Assessment is planned to be delivered in the second half of 2008. It will react to the provisional outcome of the forum's works.

Section 1 - Procedural issues and consultation of interested parties

This Communication is listed in the Agenda Planning of ENTR and in the agenda planning of JLS under number 2006/JLS +/012 with the title 'Communication on Public Private Dialogue in Security Research'.

No specific inter-service steering group was established. Other DGs have been informed and consulted informally on this initiative.

Besides ENTR and JLS, all relevant Commission services (INFSO, RTD, TREN, TAXUD, SECGEN, ENV, RELEX, SANCO) have participated or followed the work of ESRAB and will be involved in the future work of ESRIF.

¹ Meeting the challenge: the European Security Research Agenda, a Report from the European Security Research Advisory Board, September 2006.

At the end of 2005, a major European wide conference was organised around the theme of public-private partnership for Justice, Freedom and Security. To assist in the preparation of this conference, as well as to support policy development, a Steering Group was set up consisting of representatives of general business organisations such as UNICE, the ICC, the EFMA and others, as well as representatives of the Member States, their law enforcement authorities and Europol. This Steering Committee has met regularly during 2005 and 2006. Also, separate workshops and meetings took place, one of which within the Forum for the Prevention of Organised Crime.

Security related stakeholders, i.e. public end-users, research establishments, industry, other European organisations such as EP and EDA, civil society organisations have been involved in the work of the Group of Personalities (GoP)² and ESRAB paving the way for ESRIF.

On 26 March 2007, in the European Conference on Security Research, held in Berlin in the framework of the German EU Presidency, Vice-Presidents Franco Frattini and Günter Verheugen announced the creation of the European Security Research and Innovation Forum (ESRIF).

A thousand delegates from the EU Member States, but also from Norway, Croatia, Turkey, Switzerland, Israel, Russia, the United States and Australia from public authorities and the industry acknowledged the importance of the interface between the user and supply side for security solutions.

Section 2 - Problem definition

Security research is scattered between the EU level, the national level and the regional level with a clear risk of duplication, scientific and technological underperforming and lack of vision. No exact data exist on the number and funding of security research activities in the MS, which are in most cases spread thinly over different Ministries (Interior, External relations, Defence, Research, Industry, Finance) or public services (police, civil protection, border control).

Five MS have started or are about to launch a national security research programme. Other MS are thinking of it and most of the MS have recently stepped up co-ordination efforts.

In order to co-ordinate these nascent and existing national, regional and European activities, and to avoid duplication and fragmentation, it is important to have a proper consultation mechanism and where possible work out a strategic vision with better defined roles for the different stakeholders.

The EU competitors, the USA in the first place, have not remained idle and re-organised themselves (e.g. Dpt. of Homeland Security) backed by substantial funding.

Some confirmation and support is given by the GoP and the ESRAB final reports.

² The creation of the Security theme in FP7 was based on the recommendations of a 'Group of Personalities' (GoP), 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 security research theme at EU level and the creation of the 'European Security Research Advisory Board' (ESRAB).

According to the GoP report³,

*'Europe should be able to get a much better return on its defence research investment. European efforts are limited in this area and remain fragmented at national level. **Wasteful duplication persists**, particularly in product development, with only a small portion of resources spent on European cooperation. This dispersion is another consequence of fragmented defence markets where the absence of a single customer with a single set of requirements increases costs and leads to inefficiencies.*

***In the field of non-military security, these shortcomings are even more prominent**, since it involves a variety of customers within each Member State with very different tasks and requirements, e.g. the police, fire brigades, civil protection, border control, Ministries of Interior and Defence, power, gas and oil suppliers, air and seaports) . In addition, the organizational and institutional affiliations of these customers differ greatly within and between Member States. Consequently, the definition of capability needs and acquisition are highly fragmented without any coordination at the European level. Moreover, public funding of non-military security research is generally limited.'*

According to ESRAB,

'European security research needs to be complementary to national security research programmes. Where these exist, they should be aligned to the EU programme, and where they do not, it is proposed that these should be established, supported by a critical mass of resources. Funding at EU level should not substitute national funding in this important Area⁴.'

According to the GoP report⁵,

the period 2007-2013 appears desirable.'

Subsidiarity

Security research is part of FP7, co-decided by Council and EP, and based on art.163 and following of the EC Treaty. Research is a shared competence between the European Community and the MS.

There is a need for EU action because the problem of scattered security research and the underperforming cannot be solved by individual Member states actions alone.

The aim of this Communication is to bring together in forum, on a voluntary basis, the demand and supply sides of technologies and solutions, the relevant EU Institutions and the Member States and prepare a Joint Security Research Agenda which should become the reference document for security research programming, both on the European and national / regional levels.

³ http://ec.europa.eu/enterprise/security/doc/gop_en.pdf

⁴ Meeting the challenge: the European Security Research Agenda, a Report from the European Security Research Advisory Board, September 2006.

⁵ http://ec.europa.eu/enterprise/security/doc/gop_en.pdf

The Subsidiarity principle will be fully respected. The proposed public private dialogue will discuss on a voluntary basis in a bottom up way, how duplication of research activities can be avoided and synergies achieved between the different levels: EU, national, regional and industry. The outcome of the discussions, the Joint Security Research Agenda, will be an advice to the Commission and the MS.

A similar exercise has been carried out in the past in the field of aeronautical research by the ACARE forum⁶.

Security is one of the important challenges we are facing at the moment. 86% of the European Union (EU) citizens are of the opinion that security questions should not only be dealt with at national but also at EU level⁷.

Section 3 - Objectives

The general policy objective is to increase the security of the EU citizens and to strengthen the industrial base in the EU.

The specific policy objectives are:

- to draw a shared and clear view of European security research needs and priorities;
- to bring together and better use existing capabilities;
- to increase complementarities and synergies between the different elements of European security (policy, implementation, standardisation, research, and other related activities) both at European and national level.

The operational objective is to deliver, towards the end of 2009, a Joint Security Research Agenda for the coming years.

Section 4 - Policy options

Option 1, the no-policy change option would consist in not reflecting on identified problems.

Option 2 is to establish a forum for a Public Private Dialogue in the area of Security. Its goal is to improve the prevention and the fight against terrorism and serious organised crime.

This was the aim of the original Communication as planned by JLS in the 2006 CLWP. It is now proposed to transform this into a Joint Communication with ENTR and create a public private dialogue forum in the immediately operational area of Security Research covering a broader set of areas (see Option 3).

⁶ ACARE published its second Strategic Research Agenda in October 2004

<http://www.acare4europe.com/docs/ASD-exec%20sum-2nd-final-171104-out-asd.pdf>

⁷ Special Eurobarometer, "The role of the European Union in Justice, Freedom and Security policy areas", Fieldwork: June-July 2006, Publication: February 2007.

Option 3 is to establish a forum for a Public Private Dialogue in the area of Security Research and Innovation. Its scope would be based on option 2 by adding other missions such as improved border control, crisis management, critical infrastructure protection, interoperability and socio-economic aspects to the two initially foreseen missions (terrorism and organised crime).

The forum will have a consultative role in both options 2 and 3.

Back ground information on policy option 3

1. The creation of the Security theme in FP7 was based on the recommendations of a ‘**Group of Personalities**’ (GoP), 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.), the GoP recommended the launch of security research theme at EU level and the creation of the ‘European Security Research Advisory Board’ (ESRAB).
2. ESRAB, the European Security Research Advisory Board, was created by Commission Decision 2005/516/EC on 22 April 2005 and published its final report on 22 September 2006. It contains input for FP7, i.e. recommendations on the technologies that should be developed under FP7.

ESRAB was composed of high level persons from public authorities, industry, research organisations, civil society organisations and European institutions.

The ESRAB report also suggested the creation of a European Security Board, (as a follow-up of ESRAB which ceased to exist on 31 December 2006) to foster greater dialogue and a shared view of European security needs. The Board should bring together, in a non-bureaucratic manner, authoritative senior representatives from a cross stakeholder community of public and private stakeholders to jointly develop a strategic security agenda and act as a possible reference body for the implementation of existing programmes and initiatives⁸.

This Communication is going in the direction of this ESRAB recommendation by proposing the creation of the European Security Research and Innovation Forum (ESRIF).

The ESRIF would develop its activities in full compliance with fundamental rights, in particular with the protection of personal data.

In terms of setting up the Forum, there are two sub-options:

Sub-option 3.a. The European Security Research and Innovation Forum (ESRIF) would be set up via a Commission Decision.

Sub-option 3.b. The European Security Research and Innovation Forum (ESRIF) would be set up, **not via a Commission Decision**, but as an independent body with members coming from public authorities in the Member States, industry, civil society organisations and European bodies (including the Commission).

⁸ Meeting the challenge: the European Security Research Agenda, a Report from the European Security Research Advisory Board, September 2006.

Under option 3b the Commission would not steer or lead the work of ESRIF. The option of setting up the Board without a Commission Decision would increase the co-ownership of the Joint Security Research Agenda, the report that ESRIF will deliver. There's an added value by integrating the opinions of the different stakeholders (regional, national, European and industrial) on an equal footing. One of the elements of the successful outcome will be the extent to which all stakeholders will accept the Joint Security Research Agenda as a basis for their own funding decisions. It is therefore mainly a question of proportionality and subsidiarity not to decide on the creation of ESRIF by the Commission services.

With regard to the criteria for membership of ESRIF, they follow from the necessity to have the whole security community and continuum covered, i.e.:

- Demand side (public authorities, public and private end users)
- Supply side (industry, research establishments, and academia)
- Civil Society Organisations, think tanks and other relevant expert
- Commission services
- European organisations and EP

In terms of process, nominations letters with requests for nominations are sent to the Permanent Representations of the MS and Associated States.

All options considered are non-regulatory except option 3a requiring the adoption of a Commission Decision.

Section 5 - Analysis of impacts

Given that ESRIF has not yet been created and the Public Private Dialogue in Security Research not yet started, it's too early to fully assess the impact of ESRIF's work.

As indicated in the Executive Summary, a more detailed impact assessment will be carried out in the second half of 2008 when a Communication will react to the provisional outcome of the forum's works.

Therefore, we can only indicate the impact assessments of the different options for the creation of the ESRIF and the launch of the Public Private Dialogue.

Policy Option 1: No action is taken

Economic impacts	<p>No positive economic impacts. No coherence in security research programming between EU, MS and Industry.</p> <p>No coherent development of a technology base and market for security products.</p> <p>Comparative weakening of our competitive position with regard to main competitors.</p>
Environmental impacts	<p>No or negative impacts. The general objective of a more coherent security research strategy at EU level is to strengthen the competitiveness of industry and to protect the EU citizen. The environmental benefit is only a side benefit. E.g. better co-ordinated research efforts against terrorist attacks on water distribution surveillance aims to better protect the citizen but would also prevent pollution and environmental disasters.</p> <p>If no action is taken, there will be no environmental side benefits.</p>
Social impacts	<p>No increase of employment, stagnation or decrease.</p>

Policy Option 2: A Public Private Dialogue in Security is launched

Economic impacts	<p>Difficult to predict.</p> <p>Start of public private partnership in a limited number of areas (terrorism and security) and in the less operational and broad field of Security. Limited economic impacts. The development of a technology base is only a part of the wider security goals (e.g. police and justice co-operation).</p>
Environmental impacts	<p>Not the creation of the forum but the work of the forum could contribute to the protection of air, water and soil quality and the prevention of other environmental risks, but to a lesser extent than under option 3.</p>
Social impacts	<p>Likewise, not the creation of the forum but the work of the forum could contribute to the preservation and increase of employment and the labour market in the EU, but to a lesser extent than under option 3.</p>

Under Policy Option 2, there are no additional administrative costs for the stakeholders (public authorities, MS) because this initiative is not creating any legal obligation to provide information.

Policy Option 3a: A Public Private Dialogue in Security Research is launched, ESRIFF is set up by Commission Decision.

Economic impacts	<p>The creation of the forum and the start of the public private dialogue itself will not directly lead to positive economic impacts but the work of the forum itself is expected to contribute to:</p> <ul style="list-style-type: none"> – A greater coherence of innovation and research which will lead to new technologies and products. – The gradual creation of an internal market for security goods and services. <p>The market for security goods and services will gradually be created in the following way. Security authorities and services will establish contacts with industry and research communities, they will learn to speak each others language and understand better the requirements and opportunities of the sector. The demand side will look for better interoperability of the products and services and the supply side will be able to offer it. Prices per unit will go down and markets will grow. The delta can be invested in better quality from which competitiveness of the industry will benefit.</p> <ul style="list-style-type: none"> – The decrease of costs due to terrorist attacks (such as human health, disruption of infrastructures and economic processes in general). – There are no additional administrative costs for the stakeholders
-------------------------	--

	(public authorities in the MS, industry) because this initiative is not creating any legal obligation to provide information.
Environmental impacts	<p>The work of the forum will contribute to the protection of air, water and soil quality and the prevention of other environmental risks.</p> <p>The general objective of a more coherent security research strategy at EU level is to strengthen the competitiveness of industry and to protect the EU citizen. The environment is not the main focus.</p> <p>For example research in the area of bio-preparedness would in the first place aim to save lives and only secondly to preserve the environment. The environmental benefit is clearly present but only in a preventive way and only as a side benefit.</p>
Social impacts	Likewise, not the creation of the forum but the work of the forum will contribute to the preservation and increase of employment and the labour market in the EU.

Policy Option 3b: A Public Private Dialogue in Security Research is launched, ESRIF is set up *WITHOUT* Commission Decision.

Economic impacts	<p>The creation of the forum and the start of the public private dialogue itself will not directly lead to positive economic impacts but the work of the forum itself is expected to contribute to:</p> <ul style="list-style-type: none"> – A greater coherence of innovation and research which will lead to new technologies and products. – The gradual creation of an internal market for security goods and services. <p>The market for security goods and services will gradually be created in the following way. Security authorities and services will establish contacts with industry and research communities, they will learn to speak each others language and understand better the requirements and opportunities of the sector. The demand side will look for better interoperability of the products and services and the supply side will be able to offer it. Prices per unit will go down and markets will grow. The delta can be invested in better quality from which competitiveness of the industry will benefit.</p> <ul style="list-style-type: none"> – The decrease of costs due to terrorist attacks (such as human health, disruption of infrastructures and economic processes in general) – The main economic advantage of setting up the Board without a Commission Decision is that it would increase the co-ownership of the Joint Security Research Agenda, the report that ESRIF will deliver. By integrating the opinions of the different stakeholders on an equal footing , we expect that the Joint Security Research Agenda will be a better accepted basis for the different players - be they
-------------------------	---

	<p>national, regional or industrial – to adapt their research funding and policy in an economically more efficient way for the EU as a whole. It is also and mainly a question of subsidiarity not to decide on the creation of ESRIF by the Commission services.</p> <p>– There are no additional administrative costs for the stakeholders (public authorities, MS) because this initiative is not creating any legal obligation to provide information.</p> <p>As to other costs, the nomination of the members of the Forum (ESRIF) will be proposed to the Commission via the Permanent Representations of the MS and Associated Countries to the EU. Members of the forum will not represent their MS, industry or other employers but participate in their personal capacity (nominations are <i>ad personam</i>).</p> <p>Members of the forum will pay their own travel and subsistence costs for their work and meetings. The Commission will reserve the meeting rooms, if ESRIF meets in Brussels.</p>
<p>Environmental impacts</p>	<p>Likewise, not the creation of the forum but the work of the forum will contribute to the protection of air, water and soil quality and the prevention of other environmental risks.</p> <p>The general objective of a more coherent security research strategy at EU level is to strengthen the competitiveness of industry and to protect the EU citizen. The environment is not the main focus.</p> <p>For example research in the area of bio-preparedness would in the first place aim to save lives and only secondly to preserve the environment. The environmental benefit is clearly present but only in a preventive way and only as a side benefit.</p>
<p>Social impacts</p>	<p>Likewise, not the creation of the forum but the work of the forum will contribute to the preservation and increase of employment and the labour market in the EU.</p>

Section 6 - Comparing the options

Option 1: No Action

If no action is taken, the security research activities in the EU will remain fragmented among the 7th RTD Framework Programme, the FP Security and Safeguarding Liberties, the national programmes, the activities of industry and of research organisations. It can be expected that the present situation with unsatisfactory dialogue between the public and the private sectors on security issues will continue, resulting in an unsatisfactory level of security for the EU citizen, and a lack of coherent technology development at EU level.

Option 2: Public Private Dialogue in Security (terrorism and crime)

This option was originally planned in the JLS 2006 Work Programme but gradually abandoned in favour of a joint initiative with ENTR (Option 3b).

Option 2 would not fully meet the policy objectives because, on the one hand, it would confine the work to a limited number of Security missions (terrorism and organised crime). On the other hand, it is felt that Security is a broad policy field covering too many aspects (Co-operation in the areas of police, justice, research, etc.) Hence, co-ordination between EU, the MS and Industry should start in a concrete domain of activities. This could be research (option 3).

Option 3: Public Private Dialogue in Security Research

Advantage to focus on one concrete domain of activities of Security.

Research is one of the most promising domains because:

A. Legal instruments and budgets exist at EU level: FP7 (2007-2013) with a budget line of € 1.4 billion for the security research theme and the Framework Programme for Security and Safeguarding Liberties (2007-2013) with € 735 million.

B. Research is an non-controversial upstream activity where the Community', the MS' and Industry's co-ordination activities can yield results in a short to medium time frame, faster let's say than in the area of sensitive policy making.

The ESRIF is expected to:

- enhance the public-private dialogue in the field of European security research and increase transparency and coordination between the various ongoing programmes and initiatives by bringing together, on a voluntary basis, all relevant stakeholder groups from the demand and supply side of security technologies and solutions.
- it should develop a **Joint Security Research Agenda** according to the needs and priorities of security policy makers and implementers, which should become the reference document for security research programming both on the European and national levels. Through its operations, the ESRIF should at the same time contribute to promoting a Europe-wide single market for security equipment.

Sub-option 3.a. In case the European Security Research and Innovation Forum is set up by Commission Decision, the Commission would clearly lead ESRIF. The Commission would nominate the members of the Forum and steer the works. The exercise risks being seen as a top-down Commission initiative.

Sub-option 3.b. In case the Commission announces the creation of the Forum and assists in the creation of the Forum without adopting a formal Commission Decision, the Forum is expected to be more neutral, ensure the involvement of all relevant stakeholders on a voluntary basis and be more effective in reaching its objective: to deliver a European Joint Security Research Agenda, in full respect of subsidiarity. Under this option, an example and precedent for ESRIF is ACARE⁹, the Advisory Council for Aeronautical Research which delivered a Strategic Research Agenda for Aeronautical Research. ACARE was set up without a Commission Decision.

Section 7 - Monitoring and evaluation

The Joint Security Research Agenda will be prepared in a voluntary bottom up way.

ESRIF will present a report with the first preliminary results of the works in the second half of 2008.

The Commission will react with a Communication and an Impact Assessment in the same period.

ESRIF will present the Joint Security Research Agenda in its final report towards the end of 2009.

Policy Objectives	Indicators	Sources of Information
<p><u>General Objectives</u></p> <ul style="list-style-type: none"> - Increase the security of the citizen - Strengthen the industrial base 	<ul style="list-style-type: none"> - Increased co-operation by industry and take up by end-users (police forces, border control agencies, civil protection forces) of new technologies to increase the security of the EU citizen. - The growth of the Security market and the strengthening of the industrial base will be difficult to assess in terms of numbers of companies and employment figures. Precise figures are not at hand and the security market is scattered over 	<p>Recommendations made in the Joint Security Research Agenda which can serve as benchmarks for later assessment.</p>

⁹ ACARE published its second Strategic Research Agenda in October 2004
<http://www.acare4europe.com/docs/ASD-exec%20sum-2nd-final-171104-out-asd.pdf>

	a variety of industries (such as ICT, transport, biotechnology, nanotechnology, defence, space).	
<p><u>Specific Objectives</u></p> <ul style="list-style-type: none"> - Clearer view of research needs - Bring together and better use existing capabilities - to increase complementarities and synergies 	<ul style="list-style-type: none"> - Extent to which national research programmes and EU Framework Programmes will be gradually geared to one another, e.g. annual research programming, funding mechanism (selection criteria, grants to the budget) (difficult to assess quantitatively). - Extent to which MS start fitting their strategic research planning into an overall EU research strategy (difficult to assess quantitatively). - Number of research entities participating in research (particularly SMEs, the big industrial players in Security research are known). - Intensity and number of contacts and joint research projects between national security programmes (e.g. between two or more MS). 	<p>Recommendations made in the Joint Security Research Agenda which can serve as benchmarks for later assessment.</p>
<p><u>Operational Objectives</u></p>	<p>Timely delivery of the report containing the Joint Security Research Agenda at the end of 2009.</p>	<p>Recommendations made in the Joint Security Research Agenda which can serve as benchmarks for later assessment.</p>
