



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 7.9.2004
COM(2004) 590 final

**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL,
THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND
SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS**

Security Research : The Next Steps

SECURITY RESEARCH – THE NEXT STEPS

In October 2003, EU Commissioners Busquin and Liikanen convened a ‘Group of Personalities in the field of security research’, drawn from European governments, academia and industry. The primary mission was “to propose principles and priorities of a European Security Research Programme (ESRP) in line with the European Union’s foreign, security and defence policy objectives and its ambition to construct an area of freedom, security and justice”.

On 15th March 2004, the Group presented its report, ‘Research for a Secure Europe’ to President Prodi. The report describes the essential elements of an ESRP and the contribution it could make to address the new security challenges of a changing world. A commentary indicating the next steps the Commission intends to take in the field of Security Research is given below. The Executive Summary and Conclusions and Recommendations of the Group of Personalities report are annexed.

The Commission welcomes the report of the Group of Personalities on Security Research. It subscribes to the main thrust of the recommendations and orientations, and will undertake, in collaboration with the stake-holders, necessary action as set out in chapter 4 - The Next Steps.

The Commission invites the Council and the European Parliament to endorse the orientations of the Report of the Group of Personalities on Security Research, and to give their support to the proposals outlined in this Communication and its Annex.

1. INTRODUCTION

Political, societal and technological developments have created a fluid security environment where risks and vulnerabilities are more diverse and less visible. New threats have emerged which ignore state borders and target European interests both within and outside EU territory.

Events such as the Madrid railway attacks of March 2004 underline the need to enhance the security for citizens throughout Europe. In addition, enlargement to a 'Europe of 25' demands extra efforts to ensure a consistent high level of security throughout the whole of a Union with frontiers now extending to the East and the South.

To address the growing and diversifying security challenge, Europe needs to harness the combined and relatively untapped strengths of relevant industry and coordinates the research community in order effectively and innovatively to address existing and future security challenges, enhance the protection of the citizen and play an efficient role in peace-keeping activities. The threat to security which now exists can only be effectively addressed at European scale.

The need to address the new security situation, and the role of a strong industrial and technology base has been stressed by Heads of state and governments on various occasions:

- The Cologne European Council, which emphasised the need for a competitive and dynamic industrial and defence base
- The Lisbon Council drive to a competitive knowledge-based society
- The Barcelona Council, calling for a boost to overall research, development and innovation effort in the Union
- The decision of the Thessaloniki Council to take concrete steps in the field of defence
- The adoption by Council of the EU Security Strategy 'A secure Europe in a better world'¹
- The discussion at the Brussels Council of 25/26th March 2004 which resulted in a Declaration on Combating Terrorism.

¹ 'A Secure Europe in a Better World', presented to the European Council meeting in Thessaloniki on 19-20 June 2003 by High Representative Javier Solana, and endorsed by the European Council on 12th December 2003.

2. THE NEED FOR RESEARCH AND TECHNOLOGY FOR SECURITY

In addressing the new security challenges, technology plays a key role. The European potential to research, develop and deploy a wide range of security technologies exists. However, in facing the diversity of new threats, Europe needs to surmount current structural and functional deficiencies: reducing fragmentation and duplication of effort, increasing cooperation and achieving standardisation and interoperability.

In Europe, there has for long been a strong separation between research for civil purposes and that for defence objectives. Today, many technologies are ‘dual-use’: civil developments adding to defence capabilities, developments originally made for defence purposes leading to major innovations and benefits in the day to day life of the citizen. Moreover, terrorism has led to a blurring of lines between internal (police oriented) and external security (military). As a consequence this separation now has to be overcome.

In its Communication² of March 2003 on a common defence equipment policy, the Commission underlined the need for a competitive industrial base to support the European Security and Defence Policy (ESDP): as a corollary, this implies better coordination at European level, where consolidation of the range of political, economic, industrial and regulatory actions can take place. Equally, the Common Foreign and Security Policy (CFSP), supporting as it does humanitarian actions and interventions on behalf of the European Union, depends both now and in the future on the availability of leading-edge technologies to maximise the efficiency of the actions undertaken.

A coherent security research programme at the level of the European Union can add significant value to the optimal use of a highly competent industry. Such research should be capability-driven, targeted at the development of interoperable systems, products and services useful for the protection of European citizens, territory and critical infrastructures as well as for peacekeeping activities. Security is also a prerequisite for the good functioning of such key European services as transport and energy supply; research has an important role to play to guarantee a high level of protection.

In a European initiative on security research, Union values on individual rights, democratic values, ethics and liberties need to be respected. A balance must be struck between surveillance and control to minimise the potential impact of terrorist action, and respect for human rights, privacy, social and community cohesion and the successful integration of minority communities. Progress in technology should go hand in hand with policy making and a strong EU policy on technology development for security may benefit the quality of legislation and other policy initiatives.

² ‘Towards an EU Defence Equipment Policy’, COM(2003) 113.

To address the need for strengthened and better coordinated security research, the Commission has undertaken two concrete actions. The first is to launch a Preparatory Action in the domain of security research³, the second, the setting up of a high level Group of Personalities to advise on a long term strategy for security research in the European Union. The Preparatory Action has been launched and the first call closes on 23rd June, whilst the Group of Personalities report was presented in March⁴.

3. THE GROUP OF PERSONALITIES REPORT

The report of the Group of Personalities identifies the role for European coordination and development of advanced technologies in monitoring and controlling perceived threats, preventing major incidents such as terrorist attack, and in crisis management and humanitarian operations. It indicates the strong potential leveraging effect of a European Security Research Programme (ESRP) and the contribution it could make to address the new security challenges of a changing world.

The report's recommendations include:

- Establishment of an ESRP, focussing in particular on internal security questions, from 2007 onwards, with funding of at least €1 billion per year, additional to that ensured today by the Community Research Framework Programme, national or other intergovernmental sources
- Creation of a “European Security Research Advisory Board” to define strategic lines of action, user involvement, mechanisms for implementation and a strategic research agenda for the ESRP
- In view of the political developments and many current initiatives, the need for cooperation between European institutions as well as all other stakeholders involved.

4. THE NEXT STEPS

The Commission welcomes the Group of Personalities report. It subscribes to the main thrust of the recommendations and orientations, and will undertake, in collaboration with stakeholders, the necessary actions, which may be grouped in four domains:

³ Commission Communication ‘On the implementation of the Preparatory Action on the enhancement of the European industrial potential in the field of security research, Towards a programme to advance European security through Research and Technology’, COM(2004) 72 final, 3.2.2004, and Decision 2004/213/EC published in OJ L 67, of 5.3.2004.

⁴ ‘Research for a Secure Europe’, Report of the Group of Personalities in the Field of Security Research, ISBN 92-894-6611-1, Luxembourg, Office for Official Publications of the European Communities, 2004. Available on the Commission web-site <http://europa.eu.int/comm/research/security>

a) Consultation and cooperation with stakeholders

The Commission will establish in Autumn 2004, a ‘European Security Research Advisory Board’ to advise on the content of the ESRP and its implementation, paying due attention to the proposals of the Group of Personalities. The Board should include experts from various stakeholder groups: users, industry, and research organisations. It will establish user needs and encourage cooperation between Member States in the exchange of Intellectual Property Rights and classified information, and the protection of secure information.

The Commission will ensure effective coordination of the ESRP with its own internal research capabilities and other European research activities, whether funded at Community, national or intergovernmental level. This coordination also relates to work in international organisations such as the UN, OSCE and NATO, and for the activities of European organisations such as the European Space Agency (ESA).

b) A European Security Research Programme

Subscribing to the recommendation to establish a European Security Research Programme (ESRP) to commence in 2007, the Commission will initiate an inter-institutional debate for consensus on such a programme, building on the work of the Preparatory Action on security research, which it will continue until the end of 2006⁵. Security research has been included in the Communication on the Financial Perspectives of the Union for 2007-2013⁶.

A programme proposal will be tabled in early 2005 on the content, multi-annual financial plan and institutional framework for an ESRP, as part of the 7th Framework Programme of Community Research⁷. The ESRP should be implemented as a specific research programme with its own set of procedures (e.g. adapted to confidentiality requirements), rules for participation, contracts and funding arrangements.

The Commission notes the recommendation of the Group of Personalities that the ESRP should be attributed an appropriate level of resources and shares the view that ESRP funding should be additional to any financing ensured today by the Community Research Framework Programme, national or other intergovernmental sources. This position is in line with the objective for the European Union to grow towards an investment of 3% of GDP in research by 2010. Furthermore, complementarities should be sought with other policy instruments and budgets to ensure the application of research results.

c) An effective institutional setting

The Commission will ensure that the requirements of the European Security Strategy, the Common Foreign and Security Policy (CFSP), the European Security and Defence Policy (ESDP) and other relevant Commission policies associated with internal security are fully taken into account in the development of security research.

⁵ The proposals received following the 2004 Call for proposals for this Preparatory action indicate a demand exceeding 15 times the budget availabilities.

⁶ Commission Communication ‘Constructing our Common Future – Political challenges and budgetary requirements in an enlarged Union, COM(2004) 101, 10.2.2004.

⁷ Commission Communication ‘Science and Technology, keys to the future of Europe: orientations for the research support strategy of the Union’.COM(2004) 353.

It is determined to develop cooperation and synergies between Community security research and relevant aspects of the European Defence Agency (EDA) work. The Commission participation in the Steering Board of the Agency and a close working relation will help implementing its aim for complementarity with EDA work and, where appropriate, mutual use of research results. It encourages Member States to work with the Commission towards improving coordination and optimisation of use of research and technology results for civil, security and defence applications. Jointly identifying and meeting common R&D and technology needs will contribute to fostering cooperation between competent authorities at different levels in a very pragmatic and concrete way.

d) A governance structure responding to the urgency and nature of the work

The Commission will establish, in discussion with Member States and other stakeholders and based on its experiences with RTD programme management, the best mechanisms to ensure effective management of the ESRP.

The Commission will put in place effective and flexible contract, participation and funding mechanisms – for example to allow co-funding of new technologies by public authorities; thereby ensuring a high degree of synergy or of complementarity - , in consultation with stakeholders and deriving from experience gained on rules and procedures during the Preparatory Action.

5. CONCLUSION

The above approach will ensure security research under a Community Framework that can provide strong added value, by:

Acknowledging that the availability of new technologies is a key element in the fight against terrorism; a strong, structured security research programme at European level is necessary to help protect European citizens and the European economy;

Reducing fragmentation, addressing duplication, increasing cooperation (including amongst Member states) to address standardisation and interoperability, benchmarking excellence, thus delivering better value for money to the European effort and removing the current dispersion, with the effect of facilitating the emergence of a true European market in this field;

Responding to the challenges and opportunities of an extended Union with a population of 455 million in 25 Member States;

Recognising that security is a problem for all Member States and all citizens, to which shared or common solutions should be sought, in full respect of European human values and ethics;

Building on existing Community experience of the management of joint research programmes, and the existence of an accepted and well-known legal framework for public-private cooperation through RTD.

ANNEX

Research for a Secure Europe

Group of Personalities in the Field of Security Research

Executive Summary and Recommendations

EXECUTIVE SUMMARY

In today's global society, the European Union faces new opportunities as well as new dangers. Political, social and technological developments have created a fluid security environment where risks and vulnerabilities are more diverse and less visible. New threats have emerged that ignore state borders and target European interests outside and within EU territory. The European Council recognized these threats in December 2003 with the adoption of the EU Security Strategy 'A secure Europe in a better world'.

These threats call for European responses and a comprehensive security approach that addresses internal as well as external security and can combine civil and military means. The closer the Union cooperates with the UN, OSCE, NATO and all its international partners, the more effective its contribution to international security will be. In particular, the EU needs to develop capabilities to protect its citizens at home as well as to deploy significant resources for peacekeeping, humanitarian aid and institution-building activities abroad.

To achieve these objectives, Europe must take advantage of its technological strengths. Technology itself cannot guarantee security, but security without the support of technology is impossible. It provides us with information about threats, helps us to build effective protection against them and, if necessary, enables us to neutralize them. Moreover, new technology trends offer new opportunities. Civil, security and defence applications increasingly draw on the same technological base – creating new synergies between different research sectors.

Using technology as a 'force enabler' for a secure Europe requires state-of-the-art industries, a strong knowledge infrastructure, appropriate funding and an optimal use of resources. Europe has high quality research institutes and a substantial and diverse industrial base from which to address technology requirements in the security domain. However, structural deficiencies at the institutional and political level hinder Europe in the exploitation of its scientific, technological and industrial strength. The dividing line between defence and civil research; the absence of specific frameworks for security research at the EU level; the limited cooperation between Member States and the lack of coordination among national and European efforts – all serve to exacerbate the lack of public research funding and present major obstacles to delivering cost-effective solutions.

To overcome these deficiencies, Europe needs to increase its funding and improve the coherence of its efforts. This implies (a) effective coordination between national and European research activities, (b) systematic analysis of security-related capability needs, from civil security to defence, (c) full exploitation of synergies between defence, security and civil research, (d) specific legal conditions and funding instruments for security-related research at the European level, and (e) institutional arrangements that are both efficient and flexible enough to combine Member State and Community efforts and to involve other interested partners.

Recent initiatives demonstrate a growing awareness of the necessity to act. In this context, the creation of the ‘Agency in the field of defence capabilities development, research, acquisition and armaments’ and the Commission’s Preparatory Action in the field of security-related research are particularly important. The challenge will be to take these initiatives forward and to develop them into a coherent approach. The establishment of a European Security Research Programme (ESRP) from 2007 onwards would be a major contribution towards the achievement of this objective.

An ESRP should take advantage of the duality of technologies and the growing overlap of security functions to bridge the gap between civil and defence research. In support of a comprehensive security approach, it should fund research activities targeted at the development of systems and products that are useful:

- In particular for the protection of Member State territory, sovereignty, domestic population and critical infrastructure against transnational threats, and
- For EU missions ‘outside the Union for peace keeping, conflict prevention and strengthening international security in accordance with the principles of the United Nations Charter’.

An ESRP should maximize the benefits of multi-purpose aspects of technologies. In order to stimulate synergies, it should look at the ‘crossroads’ between civil and defence applications and foster cross-sector transformation and integration of technologies. Its focus should be on interoperability and connectivity as key elements of trans-border and inter-service cooperation. A core of architectural design rules and standards should be worked out at an early stage.

An ESRP should complement civil Community programmes on the one hand, and security and defence research activities conducted at the national or intergovernmental level on the other. Effective coordination between an ESRP and other relevant research activities is crucial to ensure coherence of efforts.

Moreover, an ESRP must take into account the specific aspects of the security market. This entails the creation of new funding instruments and technology transfer rules. At the same time, customers must be involved throughout the process to avoid disconnecting research and procurement.

An ESRP developed along these lines is of strong social interest and can give significant added value. It would help to enhance Europe's security, which is in itself a precondition of numerous Community policies (transport, energy, telecommunication, etc.). It would foster cross-border cooperation, increase European industrial competitiveness and strengthen Europe's research base. What is more, it would contribute significantly to the EU policy on growth and competitiveness as established in Lisbon and Barcelona.

For all these reasons, an ESRP should be Community-funded. It should have a minimum annual budget of EURO 1 billion with the possibility to progressively increase it further, if appropriate. In line with the objective for the EU to invest 3% of GDP in research, ESRP funding must be additional to any financing ensured today by the Community Research Framework Programme or national or intergovernmental sources. Such an investment would be an important contribution towards making Europe more secure for its citizens.

CONCLUSIONS AND RECOMMENDATIONS

Considering the vast challenges that an enlarged European Union faces, this report has identified an urgent need to adapt the funding and the organization of European research activities to new security and technology realities.

To make this happen, we advocate:

- a) Combining national, intergovernmental and Community research efforts across the civil-military continuum in the most efficient way;
- b) Developing a specific European Security Research Programme (ESRP).

At the same time, we insist that the respect for civil liberties and ethical principles must govern all European research activities.

An ESRP can add value to the European project and is of strong social interest. It has the potential to foster industry's competitiveness and strengthen Europe's research base. It would promote cross-border cooperation and contribute to the EU policy on growth and competitiveness as established in Lisbon and Barcelona. Most importantly, it would help to enhance the EU's security, which is in itself a precondition of numerous Community policies (transport, energy, telecommunication, etc.). For all these reasons, an ESRP should be Community-funded.

An ESRP should not replace or duplicate Member States efforts. Its aim should be to support and supplement them, and to give them new coherence. Having this in mind, we put forward the following recommendations:

1. A Community-funded ESRP ensuring the involvement of all Member States should be launched as early as 2007. Its minimum funding should be €1 billion per year, additional to existing funding. This spending level should be reached rapidly, with the possibility to progressively increase it further, if appropriate, to bring the combined EU (Community, national and intergovernmental) security research investment level close to that of the U.S.

2. An ESRP should fund capability-related research projects up to the level of demonstrators that are useful in particular for Internal Security in the EU and for CFSP/ESDP-missions.
3. In closing the gap between civil and defence research, an ESRP should seek to maximize the benefits of multi-purpose aspects of technology. In order to stimulate synergies, it should encourage transformation, integration of applications and technology transfer from one sector to the other.
4. An ESRP should focus on interoperability and connectivity as key elements of cross-border and inter-service cooperation. In this context, a kernel of architectural design rules and standards should be worked out at an early stage.
5. The rules governing an ESRP must suit the specificities of security research. The Commission should, in consultation with all relevant stakeholders, develop the necessary rules for IPR and technology transfer.
6. Recognizing that many requirements will be government-specified, new financing instruments should be created to enable research funding to be disbursed, if justified, at up to 100% of cost.
7. A 'Security Research Advisory Board' should be established to draw strategic lines of action to prepare the research agenda of an ESRP as well as to advise on the principles and mechanisms for its implementation. Moreover, it should identify critical technology areas where Europe should aim for an indigenous competitive capability. The Board should consist of high-level experts from public and private customers, industry, research organizations and any other relevant stakeholders.
8. Definition of customer needs will be key for the successful implementation of an ESRP. A mechanism should therefore be established at EU level to identify in consultation with potential customers, future capability needs for Internal Security missions.
9. Effective coordination must make sure that the ESRP does not duplicate but complements other European research activities whether funded at Community, national or intergovernmental level.
10. The Commission and the Council should ensure an effective and efficient liaison between an ESRP and the future 'Agency in the field of defence capabilities development, research, acquisition and armaments'.

11. The ESRP should take into account and, where appropriate, coordinate with research efforts of international organizations with responsibilities for global or regional security issues.
12. An ESRP should aim at fostering the competitiveness of the European security industries and stimulating the development of the market (public and private) for security products and systems. Implementing the Proposals for Action put forward in the Commission's Communication 'Towards a European defence equipment market' would greatly help to achieve this objective and to maximize the benefits of an ESRP.