



Programme

Six Countries Programme
Workshop

**Linking Defence and Security R&D to Innovation:
the challenge ahead**

19 November 2004
Brussels, Belgium

Six Countries Programme Workshop **“Linking Defence and Security R&D to Innovation: the challenge ahead”**

Security is one of the large global challenges that has recently come to the fore due to world events and societal changes. Security is certainly one of the main priorities for the US government, but the European Commission has also put increased emphasis on security by launching a European security strategy. Linking defence R&D to innovation is one of the main topics in these defence and security initiatives.

The international innovation network **the Six Countries Programme** (6CP) organises the workshop “Linking Defence and Security R&D to Innovation: the challenge ahead” in Brussels, Belgium, Friday 19 November 2004. The workshop aims at stimulating a discussion and exchange of ideas related to the role of defence and security R&D for innovation, i.e. the successful translation of R&D results into new products, processes and services both in the security and defence field and elsewhere in the economy, and the challenges ahead. The next pages present the programme of the workshop in more detail.

The Six Countries Programme would like to invite you to the workshop in Brussels. The workshop will be organised for a selective group of people, who have expertise in defence-related R&D and are interested in the role of defence and security R&D for innovation. The workshop will be hosted by IWT-Flanders, the Institute for the Promotion of Innovation by Science and Technology in Flanders.

Six Countries Programme – the innovation policy network

The Six Countries Programme (6CP) is an international network of experts, policy makers and practitioners engaged in research and policy making on innovation. Its major aim is to contribute to a better understanding of innovation processes, their impacts on the economy and society and the development of effective (public) innovation policies. The organisation was established in 1975 and today there are 10 members.

The Six Countries Programme seeks to contribute to research and policy making by organising conferences in the autumn and spring of each year. The objective of these events is to provide a forum for an open-minded exchange of information, reflection, assessment of new developments, and identification of 'new issues'. In particular, the 6CP tries to stimulate experts in the field to engage in analytical and empirical research focusing on new perspectives. It also seeks to motivate decision-makers in governments, companies and societal organisations to participate in multinational learning processes by establishing new networks and reinforcing existing ones. Participants participate 'à titre personnel'. The results of the conferences are diffused via the 6CP website, a 6CP newsletter, papers in renowned journals, edited volumes and other publications.

Linking defence and security R&D to innovation: the main issues

The workshop will address three major issues in defence and security R&D:

1) Linking defence and security R&D to innovation: the challenge ahead

Based on the experiences of the US approach of funding defence R&D, a long existing discussion addresses the relation between defence R&D and civil innovation. The basic idea is that technology transfer could happen between civilian and military applications. One broadly discussed aspect of this technology transfer issue is dual use technologies. Dual use technology has been advocated as the solution for the twin problem of maintaining a high defence technology base and improving economic competitiveness. A more recently discussed aspect is how an increased attention for commercialisation by public defence labs could change the relationships with industry and government defence agencies

In this part the workshop explores and discusses the latest developments and changes in the approaches to the funding and performance of defence R&D. The discussion will focus on the relation between research and innovation, and between public defence labs and industry itself, more than on a macroeconomic discussion about the contribution of defence R&D to the economy.

2) New policy frameworks in the United States

The US government invests heavily in defence and homeland security related R&D, especially since the attacks in 2001. One of the characteristics of the US approach is the emphasis on applicability of defence RTD and the strong support for defence RTD in the industry.

In addition to the strongly increased support for defence & security R&D in the US, the three main themes in the discussion about the present developments in the US could be:

- *Changes in the public procurement initiatives*: the public procurement initiatives are being reformed and this influences the structure of the defence R&D and innovation and the relationships between public defence labs and industry
- *Transformation of the defence industry*: the corporate structure of military producers is changing because of mergers and acquisitions, but also because of public procurement reforms. This is creating industrial giants in the US and in Europe as well. This has major implications for the industrial structure, the competition between US and Europe, and for the relationships between defence labs and industry in both the US and Europe.
- *Network centric operations and capabilities*: high tech weapons, platforms and vehicles, many of them unmanned, are co-ordinated by central command posts and not frontline commanders. Instead of a strict division between land, air and sea military operations, warfare is increasingly structured in a network centric way, in which land, air and sea operations are increasingly linked to each other. This has also consequences for the development of new technologies, i.e. the focus is on the development of warfare systems instead of 'separate' technologies.

In this part of the workshop the present developments in the US on defence & security R&D and the relationships with innovation will be discussed. In addition, the workshop

will discuss the consequences of these developments for the European situation. Will the EU lose competitiveness and what can the EU do to face the challenges coming from the US?

3) The European responses

After discussion the developments in the US, we would like to focus on the situation in Europe. What is the response in Europe and also what is the response of the European Union? The EU has announced several strategic actions, of which public procurement initiatives are very important. In addition, European countries have also developed national initiatives.

In this part the workshop addresses the European response to the challenges at both EU and national levels. Specific attention will be given to the peculiarities of public procurement initiatives in Europe, e.g. the establishment of an European defence procurement agency, the development of standards, competition and procurement rules, and the export control of dual-use technologies.

On the one hand we will discuss the EU actions, from a research perspective as well as from a defence equipment policy perspective. How can the synergies between defence, security and civil research be exploited and how can the fragmented structures in Europe become more integrated? On the other hand we would like to pay attention to some national experiences in Europe. How, for example are the UK (as a large European country) and Sweden (as a small European country) dealing with the challenges in defence R&D and innovation? In what way have they reformed their public procurement initiatives? Another interesting case is France. Where UK thinking seems much influenced by US approaches, France is often developing contrasting strategies. An interesting question is what Europe could learn from these national experiences.

Another interesting issue in the discussion could be the problems with coordination between the various national approaches at a European level. The different European countries reform their procurement approaches at their national level and this could lead to a significant degree of duplication and fragmentation of structures and programmes. The main question is how these national approaches can be combined and reformed at a European level.

Programme 19 November 2004, Brussels, Belgium

8:30 – 9:00	Registration
9:00 – 9:05	Welcome by chairman of the Six Countries Programme Mr. Paul Zeeuwts, IWT-Flanders
9:05 – 9:50	Innovation and defence R&D: an evolving relationship Dr. Jordi Molas-Gallart, SPRU, United Kingdom
9:50 – 10:30	Discussion
10:30 – 11:00	Coffee break
11:00 – 11:45	Innovation, Security & Growth: Perspectives from the US Innovation System – Myths, Realities & Opportunities Dr. Charles Wessner, National Academies, United States of America
11:45 – 12:45	Discussion
12:45 – 13:45	Lunch break
13:45 – 14:15	Towards a European Security Research Programme Mr. Pieter de Smet, European Commission, DG Research
14:15 – 14:45	Creating Value from Technology: The UK Approach and Experience Prof. dr. Damien McDonnell, Defence Diversification Agency, United Kingdom
14:45 – 15:15	The Swedish Approach and Experience Dr. Eva Lindencrona, VINNOVA, Sweden
15:15 – 15:45	Coffee break
15:45 – 16:15	A second wind for dual-use initiatives in France Dr. Renelle Guichard, Dauphine University, France
16:15 – 17:00	Discussion

Venue



The workshop will take place at:

Espace Moselle – Business and
Communication Centre
Rue des Drapiers 40
(Lakenweversstraat 40)
B-1050 Brussels

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Underground station:

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(Louiza)

Line 2 Simonis – Clemenceau

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