

## A systematic approach for Civil Security:

## From EU Security- Research Policy to Industrial Policy

**“When the budgets get smaller,  
we need a more systematic  
approach”**

Khoen LIEM

*DG Enterprise and Industry*

Bonn, 06/09/2012

# Presentation (I)

- I. **Political framework**
- II. FP7 – lessons learned
- III. Perspectives Horizon 2020
- IV. Perspective Security Industrial Policy



# European Security Strategy (2003) Internal Security Strategy (2010)

- Serious and organised crime
- Terrorism
- Cyber-crime
- Border security
- Natural and man-made disasters

## **Innovation Union (2010)**

- A more strategic approach towards innovation with a focus on societal challenges

## **An Integrated Industrial Policy for the Globalisation Era (2010)**

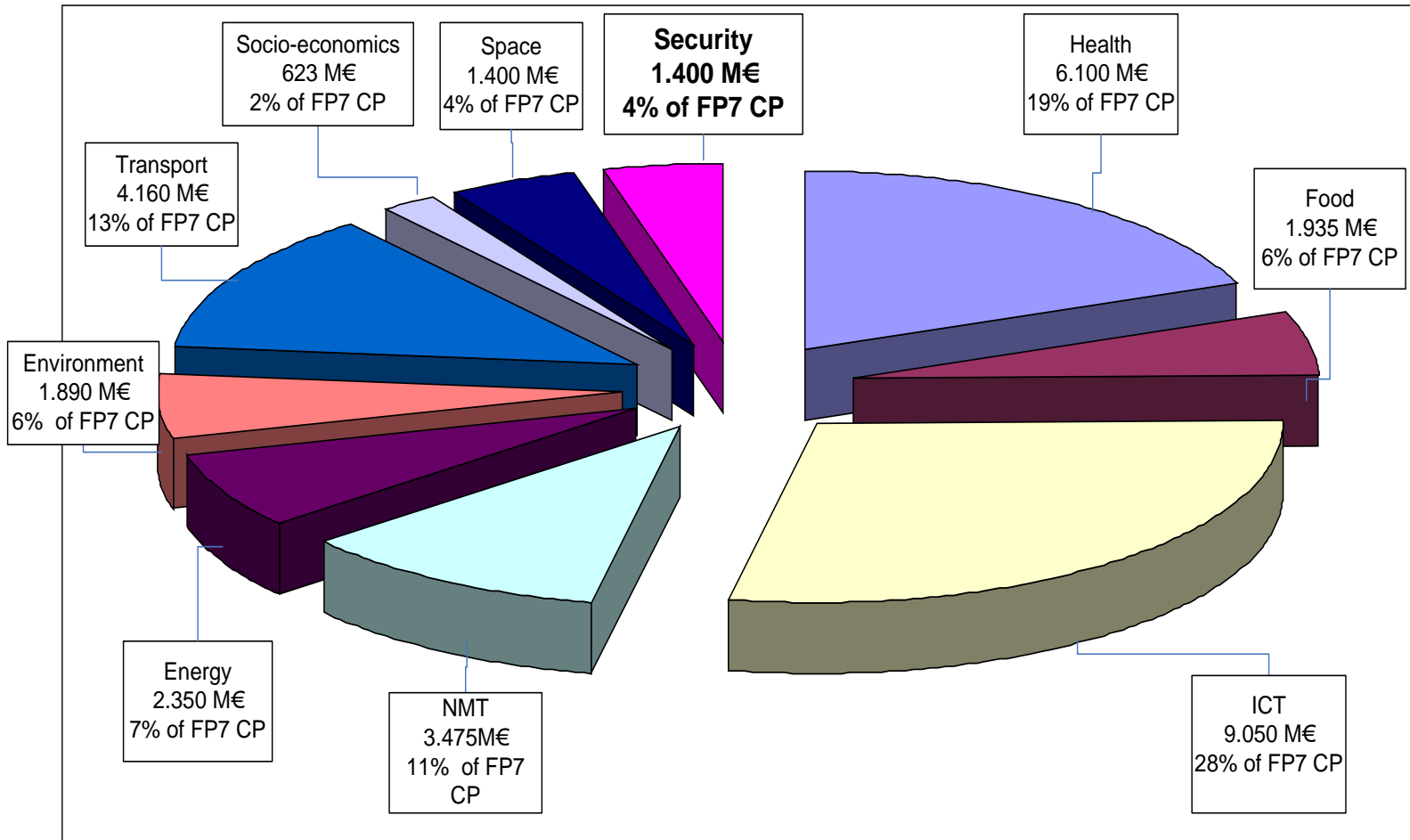
- Improve the general framework of enterprises, in particular of SMEs
- Support the development of a strong and sustainable industrial base which takes advantage of globalisation

## Presentation (II)

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# FP7 Cooperation Programme: 32.413 M€

## The 10 Themes



**FP 7  
Security Research**

**Security Missions**

**Cross-cutting Missions**

**Mission Areas**

**1. Security of the Citizens**

**2. Security of infrastructures and utilities**

**3. Intelligent surveillance and border security**

**4. Restoring security and safety in case of crisis**

**5. Security systems integration, interconnectivity and interoperability**

**6. Security and society**

**7. Security Research coordination and structuring**

**Sub Areas**

Organised Crime

Terrorism

Explosives

Ordinary crime and forensics

CBRN Protection

Designing Buildings and Urban Areas

Energy/ Transport/ Communication Grids

Surveillance

Supply chains

Cyber Security

Sea Border

Land Border

Air Border

Border checks

Intelligent Border surveillance

Preparedness

Response

Recovery

CBRN Response

Information management

Secure communications

Interoperability

Standardisation

Citizens, media and security

Organisational structure and cultures of public users

Foresight and scenarios

Security Economics

Ethics and justice

ERA-NET

SME's

Studies

NCP & Others

End-users

Training



## Results of Calls

<i>Call 1 (2007-2008)</i> <b>48 projects</b>	<i>156 million €</i>
<i>Joint Call SEC-INFISO</i> <b>9 projects</b>	<i>20 million €</i>
<i>Call 2 (2009)</i> <b>32 projects</b>	<i>117 million €</i>
<i>Call 3 (2010)</i> <b>40 projects</b>	<i>209 million €</i>
<i>Call 4 (2011)</i> <b>54 projects</b>	<i>221 million €</i>
<i>Call 5 (2012)</i> <b>Projects under negotiation</b>	<i>248 million €</i>
<b><i>Call 6 (2013) closing 22 Nov. 2012</i></b>	<b><i>300 million €</i></b>



## Mid-term FP7 results

- Strong link with the policies of the EU
- Strong structuring effect
- High rate of SME participation
- Strong focus on applications > Demos, pre-standardisation activities, etc.
- Science & technology > patents, dozens of new technologies, products and data bases

A blurred, long-exposure photograph of a large crowd of people walking across a bridge. The people are in motion, creating a sense of a busy, crowded environment. The background shows city buildings and a clear sky. The image is used as a background for the slide.

## Large Demonstrators

- Maritime Border Security
- Security of Mass Transportation
- CBRNE
- Supply Chain & Logistics
- Crisis management

## Pre-operational Validation

- Maritime border surveillance

## Presentation (III)

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## What is new?

- **A single programme** bringing together three separate programmes/initiatives\*)
- **More innovation**, from research to retail, all forms of innovation
- **Focus on societal challenges** facing EU society, e.g. health, clean energy, transport, security
- **Simplified access**, for all companies, universities, institutes in all EU countries and beyond.

\*) 7th research Framework Programme (FP7), innovation aspects of Competitiveness and Innovation Framework Programme (CIP), EU contribution to European Institute of Innovation and Technology (EIT)

## Three Priorities

1. Excellent science (27 818 M€)
2. Industrial leadership (20 280 M€)
3. Societal challenges (35 888 M€)

## Priority 3: Societal challenges

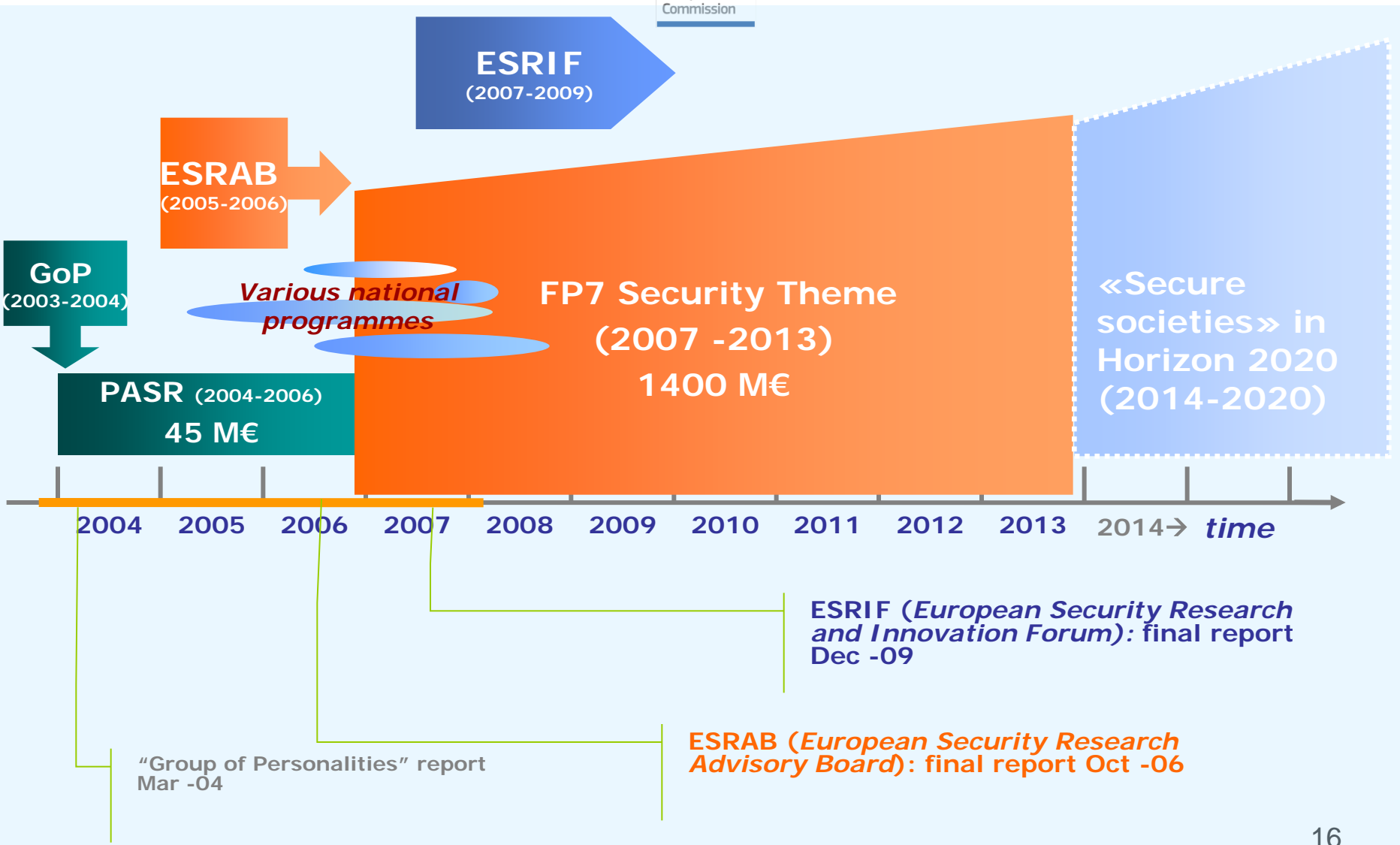
### Why:

- EU policy objectives (climate, environment, energy, security, etc) cannot be achieved without innovation
- Breakthrough solutions come from multi-disciplinary collaborations, including social sciences & humanities
- Promising solutions need to be tested, demonstrated and scaled up

## Proposed funding (million euro, 2014-20)

<i>Health, demographic change and wellbeing</i>	9 077 <sup>a</sup>
<i>Food security, sustainable agriculture, marine and maritime resources &amp; the bio economy</i>	4 694 <sup>b</sup>
<i>Secure, clean and efficient energy</i>	6 537 <sup>c</sup>
<i>Smart, green and integrated transport</i>	7 690 <sup>d</sup>
<i>Climate action, resource efficiency and raw materials</i>	3 573 <sup>e</sup>
<i>Inclusive, innovative and secure societies (IIS)</i>	4 317 <sup>*</sup> )
a+b+c+d+e: of which 1014m € for EIT	* ) of which 138m€ for EIT

# EU security research: from PASR to Horizon 2020





# Security Research in Horizon 2020

## "Secure Societies"

- Reinforcing support to EU's internal and external security policies, notably the Internal Security Strategy
- Improving the competitiveness of EU industries to address security gaps and prevent threats to security, incl. cyber-threats
- Maintaining mission-oriented approach, integrating end-user needs
- Further enhancing the societal dimension & coordination

## "Secure Societies": five specific objectives:

1. Fighting crime and terrorism
2. Strengthening security through border management
3. Providing cyber security
4. Increasing Europe's resilience to crises and disasters
5. Ensuring privacy in the internet and enhancing the societal dimension

## Implementing "Secure Societies"

- Strengthened coordination with relevant Union Agencies, such as FRONTEX, EMSA and Europol, to improve the coordination of both internal and external EU programmes, policies and initiatives in the field of security.
- Actively pursued coordination with the activities of EDA, notably through the European Framework cooperation – but civil orientation maintained
- Protection of sensitive information (RfP)

# Rules for Participation: main new elements

- 1. A SINGLE SET OF RULES** – for the whole R&I cycle, for all R&I programmes
- 2. ONE PROJECT - ONE FUNDING RATE** - up to 100% direct costs, indirect costs 20% flat rate (of direct eligible costs)
- 3. SIMPLE EVALUATION CRITERIA** – 3 criteria (ERC = Excellence only)
- 4. NEW FORMS OF FUNDING** for innovation: pre-commercial procurement, prizes, dedicated loan & equity instruments.
- 5. SIMPLER RULES** - broader acceptance of accounting practices, less time-sheets
- 6. FEWER, BETTER TARGETED CONTROLS AND AUDITS** - audit certificates only at the end; audits focussing on risk & fraud
- 7. IMPROVED RULES ON INTELLECTUAL PROPERTY** - tailor-made IPR provisions for new forms of funding, etc

## On-line Consultation

- Survey on possible research needs in Horizon 2020 "Secure Societies"
- Stakeholders' views and suggestions on:
  - challenges and derived research needs linked to the Horizon 2020 'Secure Societies' mission areas
  - indication of short-, mid-, and long-term relevance
- Survey deadline 16 September 2012

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## Policy background

The Commission announced a policy initiative for the EU security industry in the EU 2020 flagship initiative "An Industrial Policy for the Globalisation Era Putting Competitiveness and Sustainability at Centre Stage".

The Communication (COM(2012)417 final) was published on 30<sup>th</sup> July 2012:

**Security Industrial Policy**  
**Action Plan for an innovative and competitive  
Security Industry**

# Public consultation March-May 2011 Main Preferred Policy Options

<b>Area</b>	<b>Option</b>	<b>Approval rate</b>
<b><i>Certification</i></b>	<i>Step by step certification/conformity assessment procedures focused on certain priority areas or priority technologies where there is a clear EU added value.</i>	<b>71%</b>
<b><i>Standardisation</i></b>	<i>Step-by-step end-user driven standardisation based on a careful identification of existing, national, European and international standards, via Commission mandates to ESO's</i>	<b>76%</b>
<b><i>Pre Commercial Procurement</i></b>	<i>A focused pre-commercial procurement scheme being built up via the possible future FP8 and/or CIPII funding.</i>	<b>76%</b>

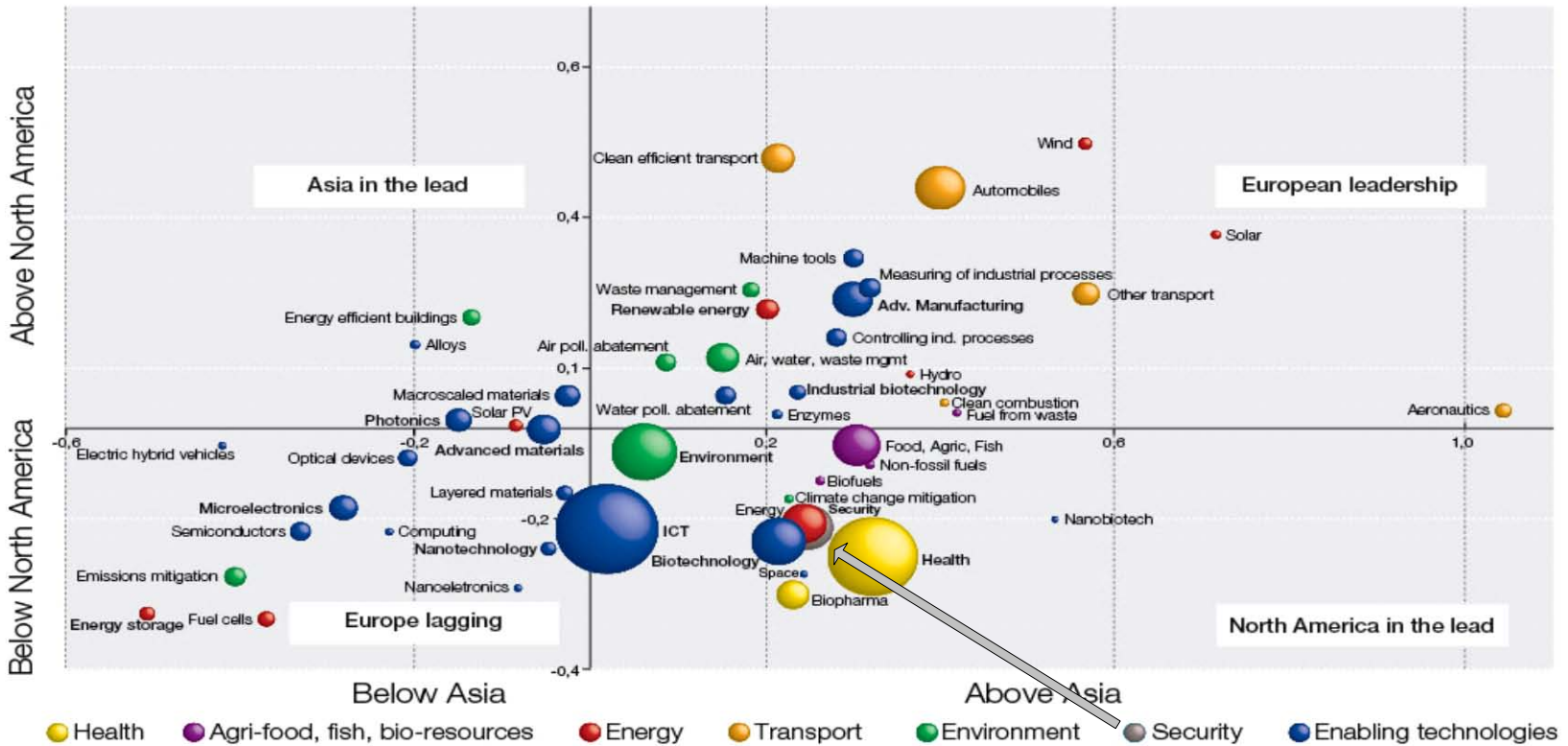


# Relative market size of the global and European security industry markets

<b>SECURITY INDUSTRY</b>			
<b>Sectors</b>	<i>EU security market (low estimate)</i>	<i>EU security market (high estimate)</i>	<i>Global security market estimate</i>
Aviation security	€1.5 bn	€2.5 bn	€5.2 bn
Maritime security	€1.5 bn	€2.5 bn	€6.7 bn
Border security	€4.5 bn	€5.5 bn	€9.9 bn
Critical infrastructure protection	€2.5 bn	€3.5 bn	€12.6 bn
Counter-terror intelligence	€4.5 bn	€5 bn	€19.4 bn
Physical security protection*	€10 bn	€15 bn	€39.2 bn
Protective clothing (first responders)	€1.5 bn	€2.5 bn	€10 bn
<b>TOTAL MARKET SIZE</b>	<b>€26bn</b>	<b>€36.5 bn</b>	<b>€103 bn</b>

\* It includes CCTV, access control equipment, intrusion and detection systems, etc.

# Europe's technological performance compared with North America and Asia



## Overview of the Studies

- Competitiveness of the EU Security Industry (2009)
- Regulatory Framework and Certification/Conformity Assessment Procedures in the Security Sector (2011)
- Pre-commercial Procurement in the field of Security (2011)
- Civil-military synergies in the field of security (2011-2012)

## Overcoming market fragmentation

- Standardisation
- Certification/ conformity assessment procedures
- Synergies between security and defence technologies

## Reducing the gap from research to market

- Aligning funding programmes, exploiting IPR routes
- Pre-commercial procurement
- Third party liability limitation

## Integration of the societal dimension

- Societal impact consideration during the R&D phase
- Privacy by design during the design phase

# Thank you.

- Security Research Event 25-26 September Essen  
[Register via our website until 7 September](#)
- Our Website:  
[http://ec.europa.eu/enterprise/security/index\\_en.htm](http://ec.europa.eu/enterprise/security/index_en.htm)
- Contact:  
[entr-security-research@ec.europa.eu](mailto:entr-security-research@ec.europa.eu)