EU Research for Security

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EU Research for Security

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See also ADM201977, Systems, Concepts and Integration Methods and Technologies for Defence against Terrorism (Systemes, concepts, methodes d’integration et technologies pour la luttre contre le terrorisme)., The original document contains color images.

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EU Research for Security

- Introduction
- Security research in FP / IST
- Towards a new European Security Research Programme (ESRP) in 2007
  - Group of Personalities (GoP)
  - Communication « Security Research - the Next Steps »
  - Preparatory Action for Security Research (PASR)
- Next Steps
A comprehensive EU approach to Security

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<th>International Co-operation</th>
<th>Economic, business and social aspects of security in Information Society</th>
<th>Cyber-crime, Internal security</th>
<th>External security / defence</th>
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</table>
| • OECD, G8, Council of Europe, UN, ITU, ... | • Electronic Signature  
• Data protection in elect. com.  
• Network & information security (CIIP)  
• Identity and Privacy mgt  
• Culture of Trust and Security  
• ENISA  
• digital right management, biometrics, smart card, IPv6, | • Framework Decision on attacks against information systems  
• Lawful interception  
• G8 CIP  
• e-identification/e-authentication  
• biometrics in visas and residence permit | • Dual use technology research  
• Crisis management  
• Peace keeping  
• State institution building |

Preparatory Action Security Research

Research and Technology

*FP6, FP7 (Security Research, ICT, Space, etc.)*
Current IST Research Activities: network and information security

... In an Ambient Intelligent environment
- Dependability
- Anomaly and attacks detection/avoidance
- Protection of digital assets
- Critical Information Infrastructure Protection & interdependencies
- Cryptography, electronic signatures and PKI
- Mobility, wireless and reconfigurability
- Next generation networks and computing models
- Smart Cards and Access technologies
- Biometrics
- Pre-normative/standards research
Why Multidisciplinary Mission-oriented European Security Research?

• “A Secure Europe in a Better World »(Dec. 2003): new threats, more diverse and less predictable

• European security culture

• Credible EU technology basis and competitive security industry

• Synergies: civil - military research; public – private use

• Coherence & coordination; reduce fragmentation & duplication

• Improve interoperability

• increase EU investments in RTD: towards 3% for growth
Group of Personalities (GoP)


- **GoP main recommendations**
  - Coordinate national, intergovernmental and community RTD efforts
  - Bridge gap between civil & defence security research.
  - Establish European Security Research Advisory Board
  - Launch European Security Research Programme (ESRP) in FP7
  - In line with EU security strategy
  - …while respecting individual rights and liberties and democratic values
  - In good cooperation with EU Defence Agency and all stakeholders
EC Communication
« Security Research-The Next Steps »

• Adopted 7 September 2004
• Subscribes to main thrust of GoP report

• Actions in 4 domains:
  – Consultation and cooperation with stakeholders (ESRAB)
  – Launch ESRP
  – Effective institutional setting (EDA)
  – Appropriate governance structure
Consultation & Cooperation

• European Security Research Advisory Group (ESRAB)
  - Experts from: users, industry, research organisations
  - Advise on content and implementation of ESRP
  - Establish user needs
  - Encourage cooperation between Member States (IPR, information classification and protection)

• Coordinate ESRP with other research at Community, intergovernmental, national level or with international organisations (incl. NATO, OECD)
ESRP from 2007

• Draft ESRP in spring 2005 (content, financial plan, rules of participation) as one specific programme of FP7

• Give ESRP an appropriate level of funding (additional to existing RTD funding in FP), thus contributing to the 3% GDP Lisbon

• Decision by EP and Council on FP7 end 2006
An effective institutional setting

- In line with EU Security Strategy and CSFP, ESDP
- Cooperation and Synergies with the European Defence Agency (EDA)
  - Commission to be part of the Steering Board of EDA
  - Administrative arrangement to organise working relations with EDA
  - Possible EC contribution to specific EDA projects
  - Role of EDA in ESRP Advisory and management structure
ESRP governance structure

• Effective management, with involvement of industry, research and (public) user stakeholders, use EC experience in managing RTD Programmes

• Appropriate contracts, participation and funding mechanisms (e.g. classified information; civil/military application)

• Use specific experience to be gained from the Preparatory Action
Preparatory Action for Security Research (PASR)

• An initiative of the European Commission
• Outside the 6th framework programme, but with procedures adapted from FP6
• Planned duration of 3 years (2004-2006)
• A total planned budget of € 65 Mio, of which € 15 Mio for 2004
• Funding up to 75%
• 2 types of activities: projects & supporting activities
PASR: Mission Priorities

• Improving situation awareness
• Optimising security and protection of networked systems
• Protecting against terrorism (including bio-terrorism and incidents with biological, chemical and other substances)
• Enhancing crisis management
• Achieving interoperability and integrated systems for information and communication
PASR Characteristics

• Projects (1 – 2 years)
  – Mission-oriented or Related to Interoperability or Citizen-oriented
  – Tangible results
  – Multidisciplinary
  – Involving final users

• Supporting activities (0.5 – 3 years)
  – Standardisation activities
  – Dissemination, networking and coordinating activities
  – Activities relevant to the need to improve the security of the European citizen and society
  – RTD roadmaps
PASR 2004 - First Call for Proposals

• Call: open 31 March, closed 23 June
• Received: 179 proposals, of which 173 are eligible
  – 50 supporting activities
  – 123 projects
• Evaluation: 5 to 10 July, with assistance of 57 evaluators, mainly from Member States
• Retained for contract negotiations:
  – 7 projects (on THz detection, CBRN, training, SecCom, surveillance, space, critical infra)
  – 5 supporting activities (crisis management, research roadmapping etc.)
PASR - Next Steps

• Pursue Preparatory Action implementation (2004-2006)
• Establish a European Security Research Advisory Board (ESRAB)
• Develop cooperation and synergies with EDA
• Prepare the future ESRP
• Initiate wide consultation of security research stakeholders, incl. NATO bodies
• Establish contacts with US DHS
FP7/IST - Towards resilience and plasticity

Assured Service and Information in Information Society

Dynamic security policies; epidemiological security models; network awareness & disaster avoidance technologies; active, self-adapting and Autonomous content; endemic vulnerabilities, auditable security properties; open and inter-connected; user empowerment, digital asset control and management;

Architecture and technologies for resilience in large scale and complex systems; multiple virtual identity; management of roles; access control; privacy aware authentication and authorization; user empowerment of rights and obligations; self-adaptable & self-healing; widely distributed attack detection systems; synthetic and cooperative recovery systems; Miniaturization of components, ICT fabric;

Towards a dependable ICT for Information Society

Resilience in large scale and complex systems; Mastering scale & volume;ability and continuity analysis; autonomous and cooperative recovery systems; risk management; human factor technologies; …
More information?

- http://europa.eu.int/comm/research/security
- http://www.cordis.lu/security
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EU Research for Security

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