



REA – Research Executive Agency

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Unit S3 – Security Research

# Security Research

## Call: FP7-SEC-2011-1

**INFO DAY**  
**Bucharest**  
**11 October 2010**



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# Agenda

1. **FP7 Security theme**
2. **FP7 Security Research Call 2011**
  - a) **Content of the Work Programme 2011**
  - b) **Timeframe**
  - c) **Budget**
  - d) **Security Research Specific Issues**
  - e) **Funding schemes**
  - f) **Areas & Topics**
  - g) **Ethics aspects**
  - h) **Security sensitive proposals**
  - i) **Future calls**
3. **General Information**





# 1. FP7 Security theme

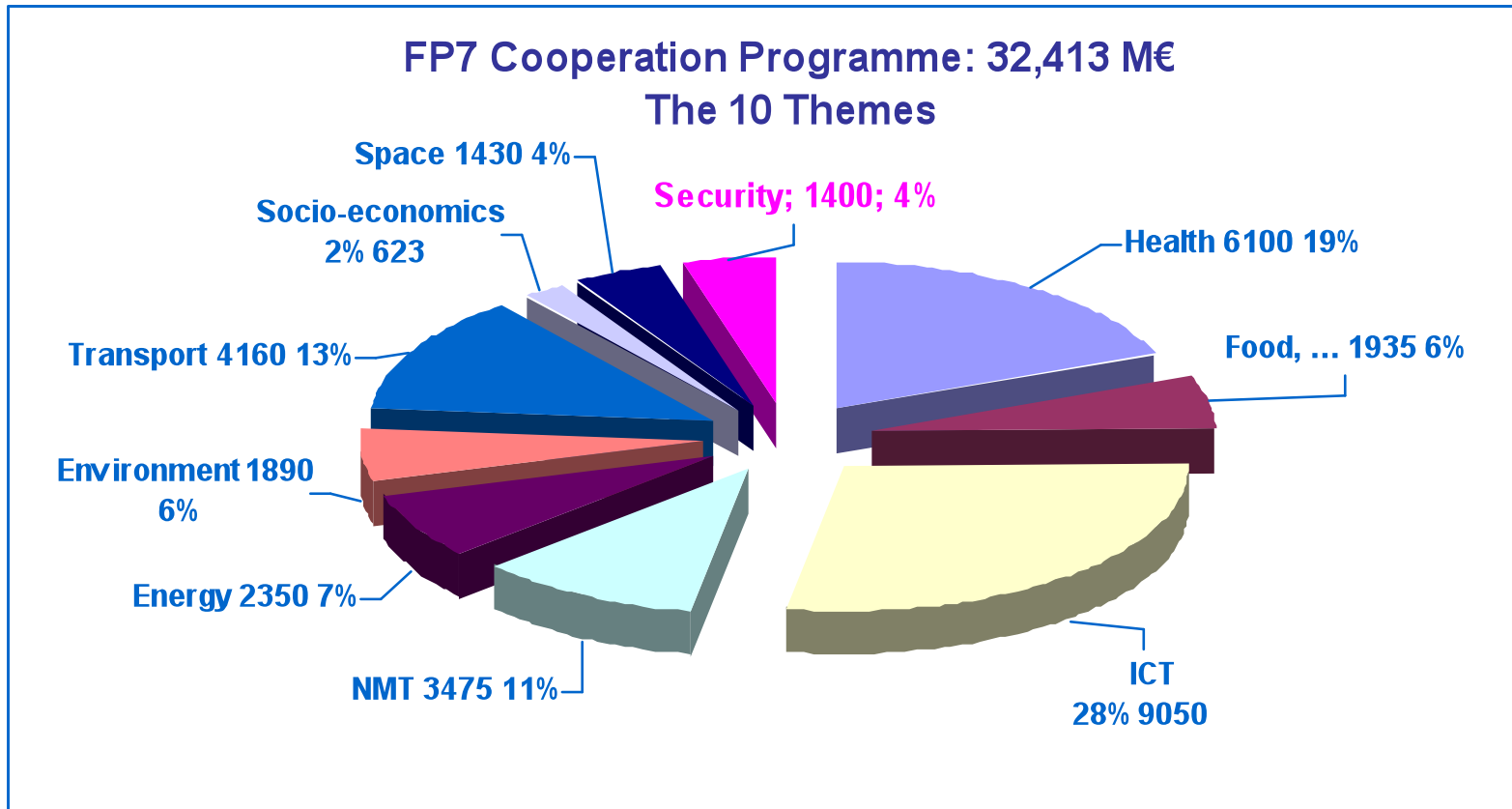


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## Total 50 521 M€



# Theme 10 Security Objectives



- ✓ to **develop the technologies and knowledge for building capabilities** needed to ensure the security of citizens from **threats** such as acts of terrorist acts and (organised) crime, natural disasters and industrial accidents while **respecting fundamental human rights including privacy**
- ✓ to ensure **optimal and concerted use of available and evolving technologies** to the benefit of civil European security
- ✓ to stimulate the **cooperation of providers and users** for civil security solutions
- ✓ to **improve** the **competitiveness** of the European security industry
- ✓ to deliver mission-oriented results to **reduce security gaps**

# Security Theme in FP7: 2007-2013<sup>6</sup>



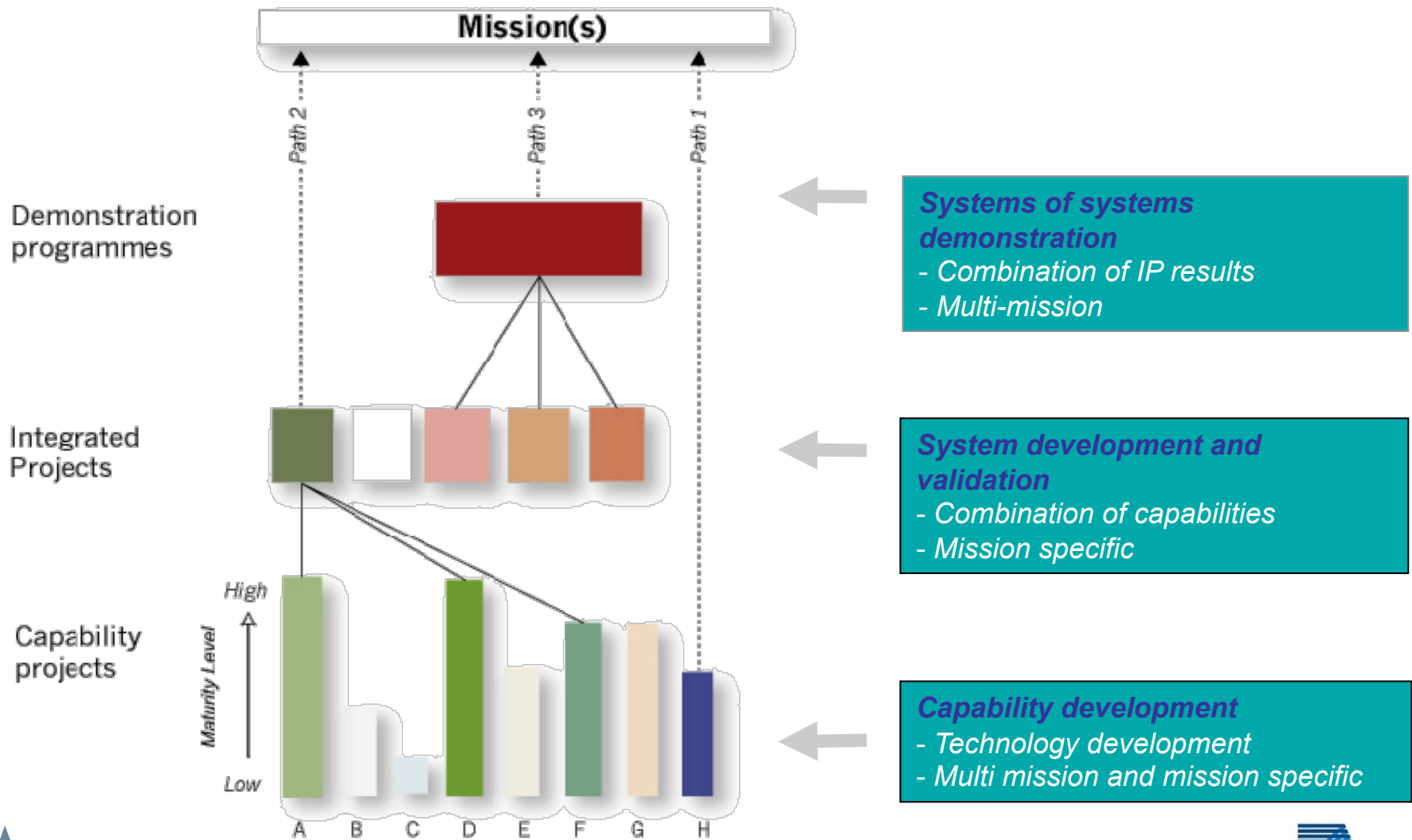
## **Four Security missions / activities:**

- 1. Security of citizens**
- 2. Security of infrastructure and utilities**
- 3. Intelligent surveillance and border security**
- 4. Restoring security and safety in case of crisis**

## **Three Cross cutting activities:**

- 5. Security systems integration, interconnectivity and interoperability**
- 6. Security and Society**
- 7. Security Research coordination and structuring**

# Research routes to meet the Security theme objectives<sup>7</sup>





## 2. FP7 Security research call



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# Content of the Work Programme 2011

- Introductory part: policy context and approach
- Content of the Security Call 4
  - **more topics** (48 in total) and more than one proposal per topic can be selected
  - **more flexibility** in choosing among the different funding schemes
- Implementation of the Security Call 4
- Other actions
- Indicative priorities for future calls



# Timeframe

- **Call publication - 20 July 2010**
- **Deadline for submissions – 2 DEC 2010 at 17:00 Brussels time**
- **Proposals evaluation – Jan/Feb 2011**
- **Indicative start of negotiations of short listed proposals - mid 2011**
- **Indicative projects starting date - end 2011/beg 2012**



# Budget of the 4th Call

Indicative Call budget: 221,430 M€\*

- Integration projects **~45%** (35-55%),
- Focused research projects (FP), Coordination and support actions and Networks of Excellence **~55%** (45-65%)
- Up to **~3%** for international cooperation and up to **~3%** for ERA-NET

\*The total budget for this call is subject to the approval of the EU

budget authority



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# Security Research specific issues:

- Up to **75%** funding
- Active involvement of **end-users**
- **Sensitive** activities and information
- **Ethical** principles



# Up to 75% funding

- **Collaborative Project** funding scheme
- Community funding for research activities may reach a **maximum of 75%**:
  - **Very** limited market size **and** a risk of "market failure",
  - **and for** accelerated equipment development **in response to new threats.**
- Proposers **need to demonstrate** this requirement in their proposal
- Demonstration activities are financed up to 50%



# End-users

- Active **involvement of end users** in the consortia is considered of utmost importance.
- Whenever possible, this should translate into a direct participation of user organisations in the consortium implementing research actions.



# Funding schemes for the 4th Call

- Collaborative projects:
  - Integration projects (large-scale integrating projects) CP – IP
  - Focused projects (small and medium-scale focused research projects) CP- FP
  
- Coordination and support actions
- Networks of Excellence



# Integration projects - IPs

- **IP** are large-scale integrating Collaborative projects, which aim at combining mission specific individual capabilities providing a security system and to demonstrate its performance.
- Indicative total cost **10-25 M€**, duration **~ 4 years**
- **EU funding > 3.5M€ (eligibility criterion)**





# Focused projects - FPs

- FPs are small and medium scale collaborative projects aiming at building up and/or strengthening security capabilities in the required missions.
- This will be done by:
  - adapting available technologies and
  - developing security specific technology and knowledge aimed at tangible results.
- Indicative total cost **2-5 M€, 2-4 years**
- EU funding **≤3.5M€ (eligibility criterion)**



# Networks of excellence - NOEs

- **NEOs** are designed for research entities that wish to combine and functionally integrate in a durable way a substantial part of their activities and capacities in a given field, with a view to creating in this field a European ‘virtual centre of research’
- No indicative total cost or duration (very exceptional cases > 5 years)



# Coordination and support actions- CSAs

- **CSA** can be either supporting or coordinating:
- **Co-ordination** (or networking) **actions** aim at coordinating research activities and policies.
- **Support actions** aim at contributing to the implementation of the FP and to prepare future research policy or
  - to develop synergies with other policies or
  - to stimulate, encourage and facilitate the participation of SMEs, civil society organisations, small research teams, etc or
  - to set up research-intensive clusters across the EU regions.Support actions often focus on one specific activity and on one specific event.
- **Indicative** total cost **0.5-1 M€, 0.5 - 3 years (up to 100% EU funding)**



# Research topics in the 4<sup>th</sup> call

- 7 topics for Integration project: *activities 1, 2, 3 and 4*
- 16 topics for Focused research project: *activities 1, 2, 3, 4 and 5*
- 8 topic for Coordination and Supporting Action (CSA): *activities 1, 4, 5, 6 and 7*
- 1 topic for Networks of Excellence: *activity 7*

## *Choice of funding schemes:*

- 16 topics for Focused research project / CSA : *activities 1, 4, 5, 6 and 7*



# 1-Security of Citizens

- **Integration project**  
SEC-2011.1.3-3 Comprehensive toolbox for humanitarian clearing of large civil areas from anti-personal landmines and cluster munitions
- **Coordination and support actions**  
SEC-2011.1.4-3 Advanced forensic framework
- **Coordination and support actions or focused research projects**  
SEC-2011.1.5-2 Identification and Development of low-risk alternatives to high-risk chemicals



# 1-Security of Citizens

- **Focused research projects**

1.1-1 Digital forensic

1.2-1 Strategies for countering a terrorist attack in an urban environment

1.3-1 Improvised Explosive Device (IED) neutralisation in urban / civil environment

1.3-2 Forensic analysis of an explosion or an unexploded IED

1.4-1 Understanding of unintended consequences of global illicit-drug control measures

1.4-2 Innovative techniques for safe external control of non cooperative vehicles

1.5-1 Development of detection capabilities of difficult to detect radioactive sources and nuclear materials

1.5.3 Development of improved forensic tools applied to radiological contaminations



## 2- Security of infrastructures and utilities

- **Integration project**
- SEC-2011.2.2-1 Airport checkpoints
- SEC-2011.2.4-1 International postal supply chains
- **Focused research projects**
- SEC-2011.2.2-2 Protection of Critical Infrastructure (structures, platforms and networks) against Electromagnetic Attacks
- CP-FPSEC-2011.2.5-1 Cyber attacks against critical infrastructures



## 3-Intelligent surveillance and border security

- **Integration projects**
  - SEC-2011.3.4-1 Security of biometric data and travel documents
- **Focused research projects**
  - SEC-2011.3.4-2 “Artificial sniffer”
  - SEC-2011.3.4-3 Border crossing points of the future





## 4-Restoring safety and security in case of crisis

- **Integration project**
- SEC-2011.4.1-1 Crisis management modelling tool
- SEC-2011.4.2-2 Unmanned search and rescue solutions
- SEC-2011.4.2-3 Rapid deployment of shelters, facilities and medical care resources following a major disaster
  
- **Focused research projects**
- SEC-2011.4.1-2 Psycho social support of Crisis Management
- SEC-2011.4.4-1 CBRN individual Protective Clothing
  
- **Coordination and support actions**
- SEC-2011.4.2-4 Enhancing crisis response abilities of the public
- **Coordination and support actions or focused research projects**
- SEC-2011.4.2-1 Post crisis lesson learned exercise



# 5-Improving security systems integrations, interconnectivity and interoperability

- **Focused research projects**
  - 5.2-1 Technical solutions for interoperability between first responder communication systems
  - 5.3-4 Video archive search
- **Coordination and support actions**
  - 5.3-1 Establishment of a first responders Platform for interoperability
  - 5.4-1 Towards standardisation of CBRN detection and identification
- **Coordination and support actions or focused research projects**
  - 5.1-1 Evaluation of identification technologies, including Biometrics
  - 5.3-2 Operational data exchange
  - 5.3-3 Developing interoperability frameworks for mission-oriented security systems



# 6-Security and Society

- **Coordination and support actions**
  - 6.1-1 Analysis of the security systems in Europe
  - 6.1-2 Protection of European citizens abroad
  
- **Coordination and support actions or focused research projects**
  - 6.1-3 Signs of 'early warning' to detect trends and weak signals in social polarisation, violent radicalisation development and segregation
  - 6.1-4 Reduction of the cognitive biases in intelligence analysis
  - 6.1-5 Surveillance and the challenges for the security of the citizen **(topic coordinated with the SSH theme)**
  - 6.2-1 Best practices for enhancing security policy in urban zones
  - 6.3-1 Assessing trends and threats in a society
  - 6.4-1 Develop socio-economic methodologies which can be adapted to different missions in security research
  - 6.5-1 Conflict resolution and mediation
  - 6.5-2 The relationship between Human privacy and security

# 7-Security research coordination and structuring

- **Network of Excellence**

7.4-1 Networking of researchers for a high level multiorganisational and cross-border collaboration

- **Coordination and support action**

7.1-1 Co-ordination of national research programmes in the area of Security research (ERA-NET)

7.2-1 Effective approach between end-users and SMEs

- **Coordination and support actions or focused research projects**

7.5-1 Innovation and research within security organisations

7.5-2 Definition of requirements by civil Security end-users for large air transport systems

7.6-1 Development of a European training curriculum for international crisis management

# Ethics aspects in security research (1)<sup>29</sup>



During the evaluation the panels check:

- applicant's **awareness** of the ethics aspects and the social impact of the research they propose
- whether the researchers **respect** the **ethical rules** and **standards** of FP7
- whether relevant **European Directives** are applied
- whether the applicants are seeking the approval of relevant **local ethics committees**
- whether relevant **international conventions** and **declarations** are applied
- the **balance** between the research objectives and the means to be used



# Ethics aspects in security research (2)<sup>30</sup>



## Ethical issues could arise:

- **During the development of the project** (for example during test or demonstrations)
- When the **system will become operational**: the ethical principles should be considered during the development (Privacy Enhancing Technologies (PETs), and not only when the system is used

# Ethics aspects in security research (3)<sup>31</sup>



## How to identify ethics issues?

- ‘**Common sense**’ first: is there anything
- raising ethical questions ?

## Possible ethics issues

- Research on human embryo/foetus
- Research on humans
- Research on animals
- Privacy
- Dual-use
- Developing countries participation
- Non-EU developed countries participation





**No classified information** to be used in the proposal. However, the project could use classified/sensitive **background** and/or produce classified/sensitive **foreground**

## In that case

- The table of **deliverables** must specify the **level of classification** for each deliverable (make sure that you don't mix the level of dissemination and the level of classification)
- A **Security Aspect Letter (SAL)** + a **Security Classification Guide (SCG)** must be attached to the proposal





# What is a sensitive proposal?

A “Sensitive” proposal is handling:

- Information and materials subject to **export-or transfer-control** (e.g. dual use items)
- Data or information requiring protection against unauthorised disclosure: **classified information**
- Information or materials subject to **security restrictions**

# Sensitive proposals - some<sup>34</sup> recommendations



- Be serious about the **sensitivity declaration**
- Consider carefully the requirements for accessing **sensitive information/material** in a project (limit it as far as possible)
- Get reference of all applicable **EU** and **national legislation**
- Contact your **National Contact Point (NCP)**
- Contact your **NSA** for sensitive proposals (OJ L193 of 23.7.2005 p.31-36)
- For **non-EU countries** find out if there are some **security agreement** between your country and



# Future FP7 calls

- **07/2011: Security Research Call 5**
- **07/2012: Security Research Call 6**
  
- **Call publications in July**
- **Call deadlines in December**



## 3. General information



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# Recommendations:

## Preparation of proposals (1)

- **Follow the FP7 guides (definition of the funding schemes, scope of topics, eligibility rules etc)**
- **Be aware of the 3 “evaluation criteria”**
  - Scientific and technical quality
  - Implementation
  - Impact
- **Foresee the take up of the results of your research**
  - Describe the perspective of a wider and general use of expected results
- **Present an overall vision of market deployment**
- **Justify the real innovative aspects (Incremental vs breakthrough);**
- **Address ethical and data classification issues**



# Recommendations: Preparation of proposals (2)

- **Clearly explain/justify the project budget**
- **Partnership:**
  - Well balance the expertise of the consortia: end users, private and public, academia, industry, SMEs etc,
  - Avoid “sleeping” partners without real contribution,
  - Avoid redundant partnerships
- **Check/link the project with other relevant research projects**



# Recommendations: Preparation of proposals (3)

- **Proof-read your proposal by a ‘neutral’ person**
- **Make the reading of an evaluator easy:**
  - Use a simple and clear language
  - Be short and concise
  - Clearly define objectives, milestones and deliverables
  - Use tables and graphs etc
- **Don’t recycle the same proposals – watch the quality!**



# More information

**REA** <http://ec.europa.eu/research/rea/>

## EU Security research website:

- [http://cordis.europa.eu/fp7/security/events\\_en.html](http://cordis.europa.eu/fp7/security/events_en.html)

## Helpdesk:

- [REA-security-projects@ec.europa.eu](mailto:REA-security-projects@ec.europa.eu)
- Centralised FP7 Enquiries Service:  
<http://ec.europa.eu/research/enquiries>

## National Contact Points:

- [http://cordis.europa.eu/fp7/ncp\\_en.html](http://cordis.europa.eu/fp7/ncp_en.html)
- <http://www.seren-project.eu>







# Thank you for your attention



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