EU funded research is keeping up trust in digital society

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Cybersecurity Strategy of the EU: An Open, Safe and Secure Cyberspace (2013)

Some Principles:

- Protecting fundamental rights, freedom of expression, personal data and privacy
- A shared responsibility to ensure security

Some elements:

- Strong and effective legislation
  - **(proposed) NIS Directive**
- Develop industrial and technological resources for cybersecurity
  - **Fostering R&D investments and innovation**

IT Security is just the tip of the cyber-iceberg

IT SECURITY

MARKET FORCES

LAW

TECHNOLOGY

PRIVACY

BEHAVIOUR

TRUST

INTERNATIONAL RELATIONS

The big picture – Calls in FP7 & CIP (I)

- **FP7-ICT-2007-1 (90M€) :**
  - Identity management and privacy enhancing tools
  - Security and resilience in network infrastructures
  - Security and trust in dynamic and reconfigurable service architectures
  - Trusted computing infrastructures
- **FP7-ICT-SEC-2007-1** (20 M€) **-** Critical Infrastructure Protection
  - **CIP-ICT-PSP-2008-2 (2,5 M€) -** Biometrics + Identity Management
- **FP7-ICT-2009-5 (90M€)**
  - Technology & Tools, Mobile Devices and Smartphones
  - Trustworthy Network Infrastructures, Cloud Security
  - Trustworthy Service infrastructures, Privacy Management
- **FP7-ICT-2011-8 (80 M€)**
  - Data policy, governance and socio-economic ecosystems
  - Heterogeneous networked, service and computing environments
  - Trust, e-identity and privacy management infrastructure

The big picture – Calls in FP7 & CIP (II)

- **CIP-ICT-PSP-2012-6 –** Fighting Botnets (7,8 M€)
- **FP7-ICT-2013-10 (35,8 M€)**
  - Security and privacy in cloud computing
  - Security and privacy in mobile services
  - Development, demonstration and innovation in cyber security
- **CIP-ICT-PSP-2013-7** – Website Security and Biometrics (4 M€)
- **Joint Calls** with Brazil (2011), Japan (2013) and Australia (2013) – (5,5 M€)

In total:

101 R&D Projects for 334 M€ EU funding

Top recipients countries (above 1M€)

1. **Germany – 49.4 M€**
2. **France – 28.9 M€**
3. **Italy – 22.2 M€**
4. **United Kingdom – 18.2 M€**
5. **Spain – 18.1 M€**
6. **Austria – 12.4 M€**
7. **Netherlands – 12.0 M€**
8. **Switzerland – 11.8 M€**
9. **Norway – 9.9 M€**
10. **Belgium – 9.5 M€**
11. **Greece – 7.7 M€**
12. **Denmark – 5.6 M€**
13. **Sweden - 4.5 M€**
14. **Portugal – 3.5 M€**
15. **Estonia – 3.2 M€**
16. **Israel – 3.1 M€**
17. **Ireland – 3.0 M€**
18. **Hungary – 1.7 M€**
19. **Finland – 1.6 M€**

Total: 232 M€

Privacy
(keeping up with digital society)

Data is the currency

Growing user awareness

From research to market opportunities

Technology to complement legislation in Europe

Privacy
(research to empower users)

New approaches on privacy:
PICOS (social networks)
PRIMELIFE (comprehensive view)

Privacy in new applications:
PCAS (mobile)
TCLOUDS, PRACTICE (cloud)
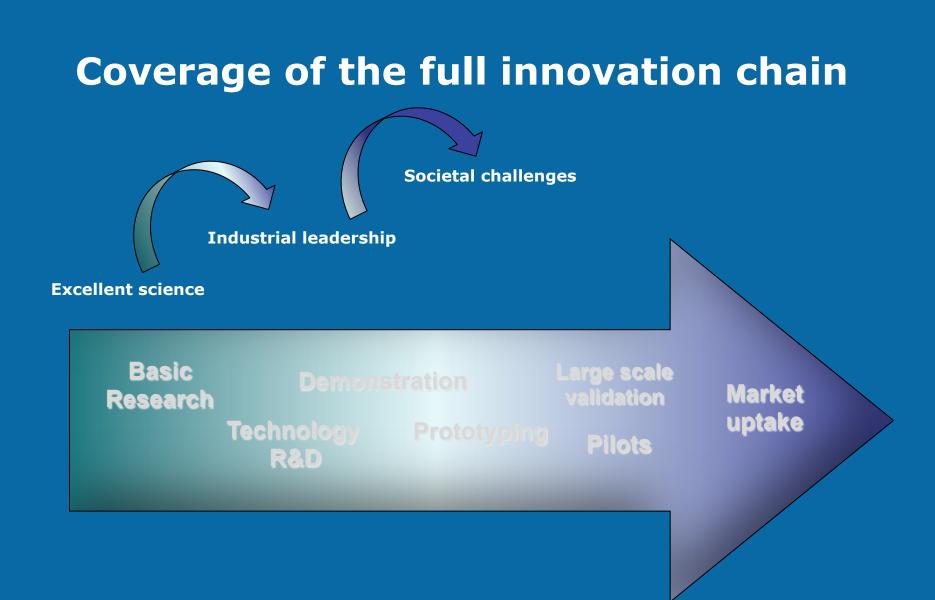ABC4TRUST (credentials)

Deployment and Innovation:
PIDaaS (private identity as a service)
DS 2014-1 Privacy

Coverage of the full innovation chain

Calls in 2014/15

LEIT (40 M€) Technology Building blocks in Security - 2014:

- Cryptography

- Security-by-Design

  e.g. project WITDOM (empoWering prIvacy and securiTy in non-trusteD envirOnMents")

Societal Challenge 7: Digital Security (97M€):
2014: (47 M€)

- Privacy

- Access Control

- Risk management and assurance models

2015:   - The role of ICT in Critical Infrastructure Protection

       - Information driven Cyber Security Management

       - Trust eServices

       - Value-sensitive technological innovation in Cybersecurity

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What stays: success stories

European support to:

- **Spin-offs and Start ups**

- **Academic Research**

- **Support European Champions to test new waters**

- **Better protection of users**

What remains to be done – challenges for H2020

From world-class research to market innovation

Europe competing globally

Industrial Policy

User trust in ICT

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

HORIZON 2020

Questions?

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