Panel: Research Agenda for Data and Application Security

How are the federal research themes relevant to the data and application security?

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“cyber threat is one of the most serious economic and national security challenges we face as a nation”
“America’s economic prosperity in the 21st century will depend on cybersecurity.”

President Obama
Toward a Federal Cybersecurity Research Agenda: Three Game-changing Themes
1. Tailored Trustworthy Spaces (TTS)

(supporting context specific trust decisions)

Research Challenges:

- Identifying dimensions of a TTS
- Policy specification and mgmt
- Validation of platf. integrity
- Detection violation
- Verifiable separation of spaces
- ...
2. **Moving Target (MT)**

(Controlled changes across multiple system dimensions)

**Research Challenges:**

- Managing MT systems
- Smart (agile, adaptive) movement
- Develop a Cyber Ecosystem to support Agility
- ...
3. Cyber Economic (CE)

(Examination to determine what impacts CE, and what incentives can be provided to enable ubiquitous security)

Research Challenges:

- Cyberspace Data
- Personal Info/Behavior
- Empower critical infrastructure providers
- …

How relevant to DASPY?

- Data anonymization
- Infrastructures that separate private data in the first place
- Data are critical asset for taking decision (adaptively)
- Distributed reputation trust is based on Data
- …
Framework Program (FP) 7 (2007-2013) - 51 billion euros

- Specific Programs -> Theme -> Challenges
- (each year) Work Programme: budgets and timetable for specific calls
- Programs:
  - 64% Cooperation in (of which, ICT 28%)
  - 15% Ideas aim at "frontier of knowledge", where risks are higher
    ERC ("NSF-like") calls for funding nationals of any country
  - 9% People: training, mobility, career development of EU researchers
  - 9% Capacities: enhancing research infrastructures

ICT Trust and Security Research in FP7:

"Central to the research is enabling users to manage and protect their digital assets, identities and personal data when they interact in the digital world."
Five closely interrelated thematic areas are promoted:

1. secure and trustworthy ubiquitous network infrastructures and their protection against emerging cyber-threats
2. assuring the protection of critical information infrastructures of modern life and managing their complexity and interdependencies
3. trustworthy and secure service infrastructures, supporting applications and end-to-end services
4. trust, privacy and identity in the digital economy
5. enabling technologies for security and trustworthiness of ICT

Example of funded project: *NESSoS project* “aims at constituting and integrating a long lasting research community on engineering secure software and services”

What’s next? “Interactive Policy Making” open this month for FP8 IT research