FIT-IT Trust in IT Systems

The Austrian Research Funding Programme for ICT Security

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A cooperation of

bmvit

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- Austrian R&D funding system and FIT-IT
- Thematic focus of FIT-IT Trust in IT Systems
- Call results
- The Austrian R&D landscape in IT security

Basic research funding by FWF, universities

FFG

>3 years to market

Thematic Programmes
15 million euro

Competence Centers
12 million euro

EC FP6

25 million euro

<3 years to market

Basic Programmes
53 million euro

Services by other institutions like AWS, WKO
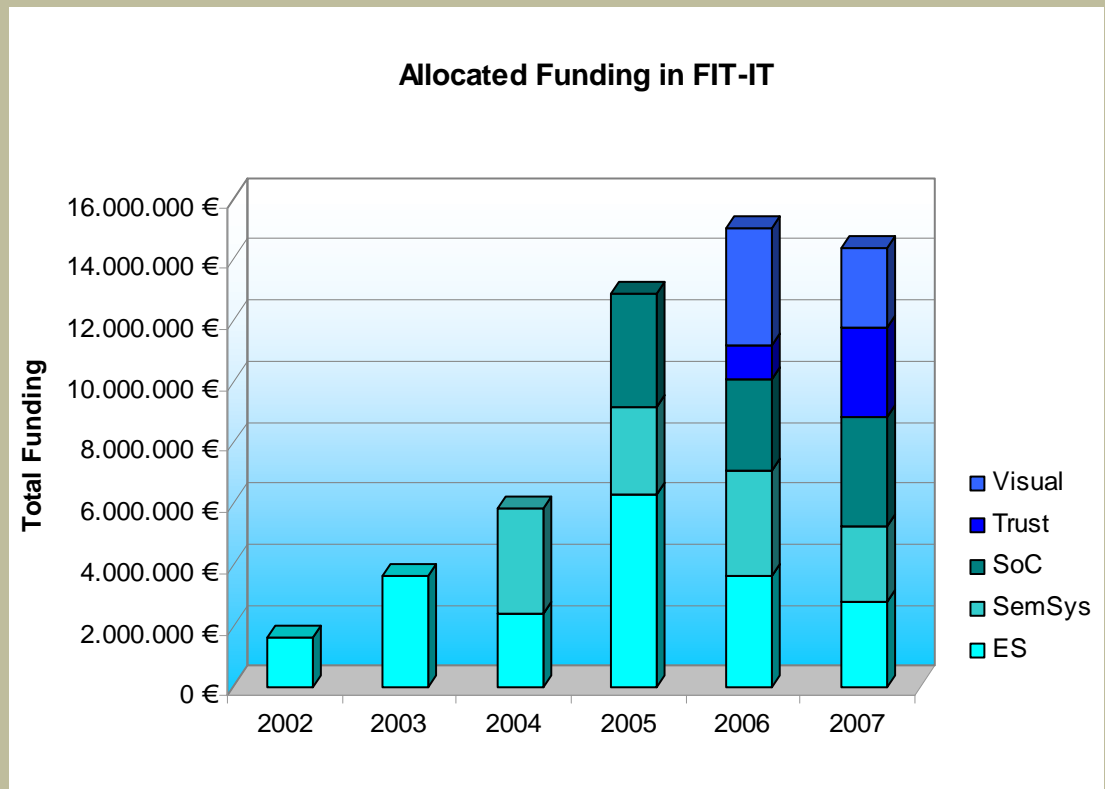
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Create radically new IT
(research prototype)

Strengthen the
competitiveness of
Austrian research and industry

Train qualified researchers

Improve international visibility

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Embedded Systems (7 Calls)
Semantic Systems (4)
Systems on Chip (3)
Visual Computing (2)
Trust in IT Systems (2)

Allocated Funding in FIT-IT

"Deserve Trust"

"The title – Trust in ICT Systems – refers to a desired **technological state.** To achieve it requires new technologies that will **justify comprehensive trust**. The programme line covers **IT security, IT safety**, and some aspects of **IT dependability** (as by appropriate design methods)."

(FIT-IT Trust in IT Systems Guidelines for Proposers, p.7)

Trustworthy Ubiquitous Networks

- IT-Systems are everywhere, applications endless

- trustworthy RFID or sensor networks

- trustworthy web applications

Trustworthy Processes and Systems

- competitive relevance of digital economy

- need for trustworthy building blocks

- trusted computing, security tokens

- design methods for dependable complex methods

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- network protocols and operating systems for trust
- security engineering – implementing secure systems
- architectures, middleware and design methods for dependable loosely-coupled systems
- cryptology
- chip design
- technologies for privacy and identity management
- digital rights management

- 8 projects funded
    - GRANDESCA - Generating RANDom values for Encryption in the presence of Side Channel and other Attacks
    - ARTEUS - Attack Resistance and Tolerance Enabling Universal Security
    - POWER-TRUST - Low POWer & Energy Relevant techniques Targeting Robust Universal Security in deep sub-micron Technologies
    - TOPAS - Trust Oriented Platform for Advanced Security

    - Pathfinder - Malicious Code Analysis and Detection
    - PIPE - Pseudonymization of Information for Privacy in e-Health
    - SECoverer - Finding Security Vulnerabilities in Web Applications
    - TRADE - Trustworthy adaptive quality balancing through temporal decoupling

- Austria has competence centers of multinationals in HW-oriented security topics
- SMEs in some areas are capable of high-quality research collaborations with academia

"In particular, security research in organisational topics including secure e-administration (**e-government, e-health**) and secure business processes is very strong. Hardware-near topics like **embedded-systems security, RFID security, or trusted computing** are also notable. Other strong contributions are found in **secure software design and malicious code detection**, and in **network security and intrusion detection**. Somewhat smaller in size, but very highly rated in international impact, are research in **cryptology** and research in **quantum cryptography**."

"When looking at the participation in FP6 IST projects in Trust and Security Technologies in 2005, Austrian research has the highest participation density [relative to population size] of all 25 member countries."

(Study on IT Security: Research Potential in Austria, by IAIK/TU Graz, June 2006)

- Successful participation in FP6/7
- FIT-IT is open for non-Austrian participants (limits to budget share)
- Academia and large enterprises are fully integrated internationally
- Question whether the same holds for SMEs

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