



RTD for Trust and Security in the Evolving Information Society

Paris, 9-10 November 2006

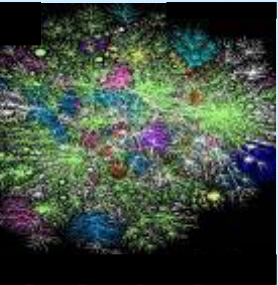
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Information Society
Technologies

What's driving the Future?

- **Further Technology Convergence**
- **Growing Inter-connectivity: Critical Infrastructure**
- **New Emerging Technologies**
 - “The Internet of Things”, RFIDs, Personal Area Networks, Wireless Sensor Networks, ...
- **Service-centric Information Society**
 - Multimedia & Mobile Web-services, Geo-spatial & location-based Services, ... over multi-purpose user terminals



**new security, dependability and
privacy challenges**



ICT for Trust and Security

From the 'walled fortress'



Closed doors, physical isolation

Security as protection

Defending data and systems

To the 'open metropolis'



Openness, unbounded,interconnecte

Trust as an enabler

Sharing content and resources

THE SCALE OF THE NEW ECONOMIC AND SOCIETAL CHALLENGES

*\$55bn virus damage costs for business in 2003, up from roughly \$20bn to \$30bn in 2002
–by Reuters (2004)*

*The likely cost of rolling out UK ID card scheme will range from £10.6bn to £19.2bn – by
LSE (June 2005)*



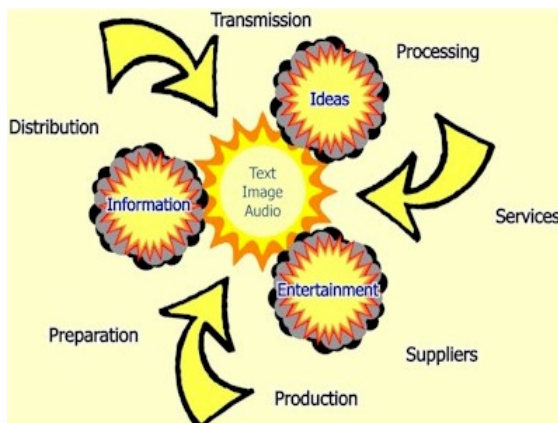
A TRUSTED INFORMATION SOCIETY

- **Mission**

- Continued development of Information Society
- Trusted eServices (eBanking, eHealth, Corporate computing at home, etc.)

see COM(2006)150

«A strategy for a Secure Information Society - "Dialogue, partnership and empowerment"»



R&D in Security & Trust in IST-FP6 (2002-2006)

Security and Dependability technologies

Trust in the use of ICT

For Critical Information Infrastructure Protection

Identity and Privacy

Trust & reputation

Pervasive networks

Pervasive services

35 R&D projects, ~ 145 M € EU funding

Trusted computing

Enabling Technologies

Access technologies & Biometrics

Crypto

Anti-crime

Identity

IRRIIS

CI2RCO

CRUTIAL

GRID

POSITIF

DESEREC

FIDIS

SEC

RESIST

UBISEC&SENS

PRIME

CONNECT

HIDENETS

DISCREET

ESFORS

Identity

FASTMATCH

MIT

Pervasive services

MDS

SCARD

INSPIRED

SERENITY

ANTIPHISH

BIOSECURE

DIGITAL PASSPORT

S3

SECOQC

ECRYPT

SECUREPHONE

3DFACE

PEPERS

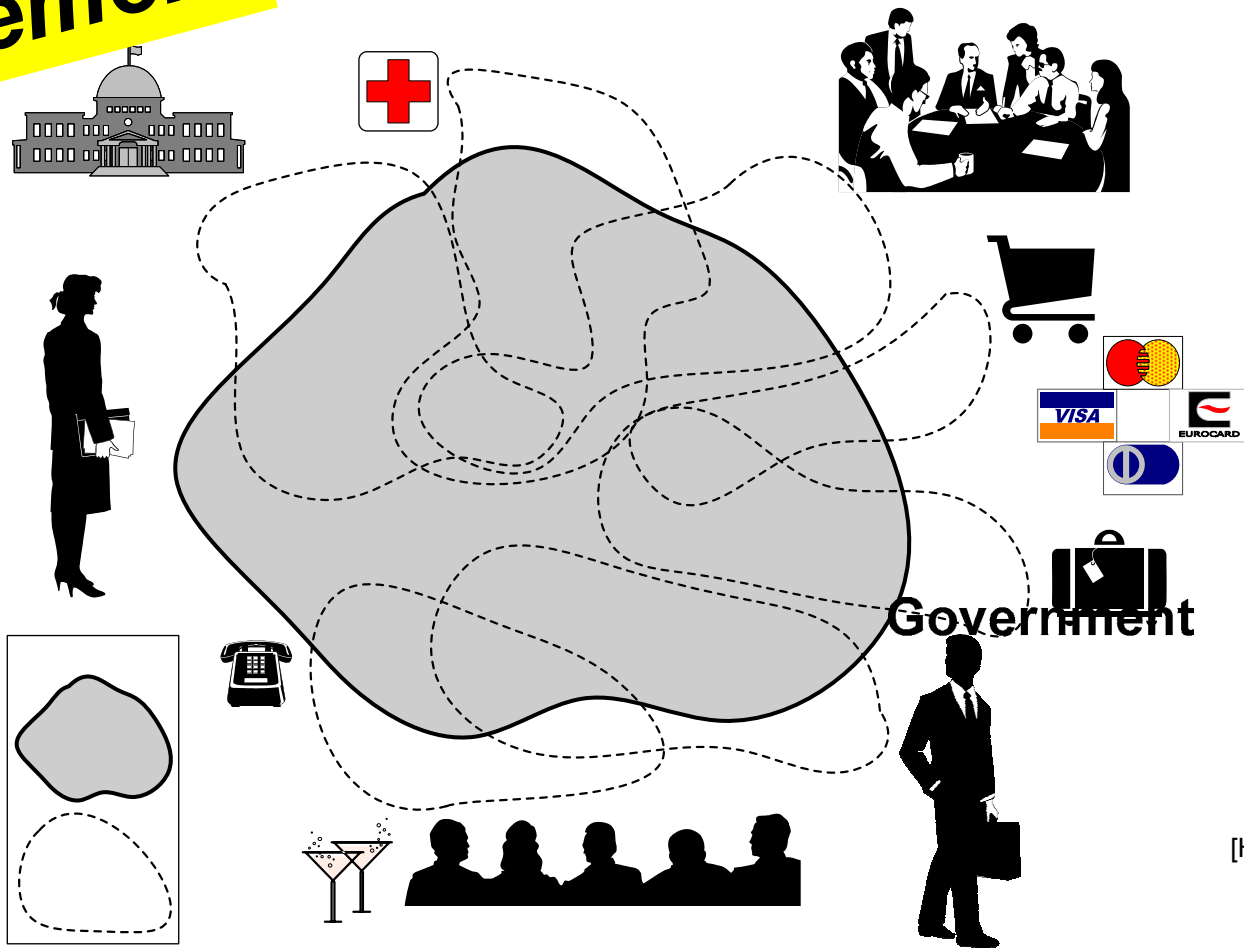
OPEN_TC

HUMABIO



Partial Identities – Federated ID Management

Identities Management



Health Ca

Government

[Hansen2005]

Tax Status

- **PRIME:** Privacy and Identity Management for Europe – an integrated project investing about 13 M€; it develops privacy-enhancing identity management solutions via an integrated approach of legal, social, economic and technical areas.
- **FIDIS:** The Future of Identity in the Information Society – a network of excellence investing about 6 m€; it address the fragmentation of research in electronic identities by consolidating joint research in this area.



TRUSTED COMPUTING

- TC based on open standards, interoperable, allow for diversity and be affordable.
- Implementation in Operating Systems must be accepted and trusted, market competition !!
- Need a dialog with all stakeholders.

FP6 IST project: OPEN-TC

Secure open source operating system with prototype applications ; LINUX Distribution package (SUSE) for OPEN_TC functionalities

Duration: 3,5 years (October 2005 – March 2009)

Budget: M€ 17,1 Effort: 175 person years 23

Contractors



The Network of the Future

Service and Software Architectures, Infrastructures and Engineering

Secure, Dependable and Trusted Infrastructures

Networked Media

New Paradigms and Experimental Facilities

- **Advanced networking approaches to architectures and protocols (incl. security & resilience of the future Internet) & validation in large scale testing environments**
- **Interconnected test beds**
 - **security, trust and ID management architectures and technologies;**
 - **for trusted access to e-services for users having no security skills**

Critical Infrastructure Protection

- **Joint initiative with Security Theme**

**Cross-cutting
large projects**

Call 1

Call 2



ICT FP7: Secure, Dependable and Trusted Infrastructures

- **Security and resilience in network infrastructures**
 - Scalable, context-aware, secure and resilient architectures and technologies
 - Real-time detection and recovery against intrusions and failures
- **Security and trust in dynamic and reconfigurable service architectures**
 - Supporting secure & scale-free composition of service coalitions
- **Trusted computing infrastructures**
 - Interoperability, end-to-end security of data and services
 - Security & Dependability in the Engineering of SW and Service Systems for designing and developing trustworthy applications and services
- **Identity Management and Privacy enhancing tools**
 - Configurable, context dependent, user controlled attributes, trust policies for ID management in static and dynamic environments
- **Coordination & Support Activities**
 - Research Roadmaps, Metrics, Support of standardisation, IN-CO, Coordination of security RTD projects

Funding Schemes: Collaborative Projects, NoEs, CSAs
Indicative Budget: 90 m€, Call 1



Preparing for ICT-FP7 Calls



- IST 2006 event in Helsinki (21-23 November 2006)

http://ec.europa.eu/information_society/istevent/2006/index_en.htm

Six networking sessions on ICT for Security & Trust

- Info Days & FP7 events

http://cordis.europa.eu/fetch?CALLER=FP7_EVENTS

- FP7 Sessions in Conferences



IST Programme

<http://cordis.europa.eu/ist/>



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ICT for Trust & Security

<http://cordis.europa.eu/ist/trust-security/index.html>

