

Trust and Privacy in the Future Internet

Privacy By Design

The definitive Workshop

2 Nov, 2009 – Madrid (ES)

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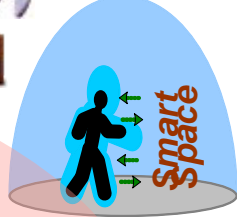
The views expressed in this presentation are those of the speaker and may not in any circumstances be regarded as stating an official position of the European Commission.



Trusted & Smart "everything"



Digital Living

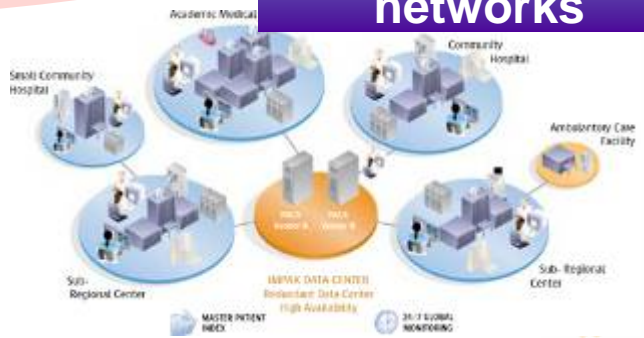


Future Internet

Transport Networks



eHealth & Health networks



Privacy and the Digital Data Explosion

The Long Tail

business, personalized applications and services. In clouds for SAAS, ...

citizens, to communicate and interact, improve the quality of their life (Web 2.0)

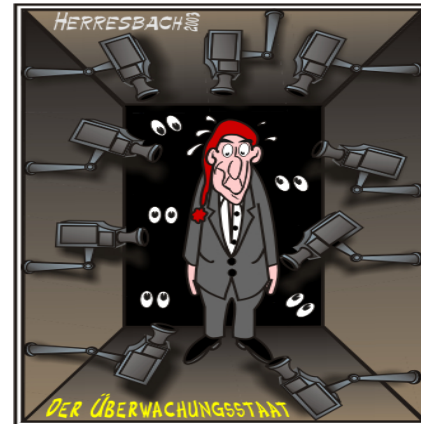
governments to service citizens and business (e-ID, e-government, e-education or e-health)



Digital Shadow

Governments: provide public security (against crime or terrorism)

Linked Data



Issues at stake

Herald INTERNATIONAL Tribune

Cyberwar and real war collide in Georgia

Le Monde.fr

Grosse faille de sécurité et solution

sundayherald

revealed: 8 million victims in the world's biggest cyber heist

ICT Systems Security

LeMondelInformatique.fr

Le cyber-espionnage économique entre dans le Top 3 des menaces

TECHWORLD

Critical infrastructures open to attack, says study

IRISHTIMES.com

YouTube case opens can of worms on online privacy

(Apr) Article 29 Working Party of EDPOs: the EU's Data Protection Directive on the processing of personal data by search engines whose headquarters are outside the EU

Privacy

THE INDEPENDENT

Phorm to use BT customers to test precision advertising system on net

(Aug) Google To Slice Existing 18 Month Data Retention Period In Half

Le Monde.fr

La colère associative monte contre Edvige, le fichier policier de données personnelles

Trust

Gartner.

The dangers of cloud computing

Internet key to Obama victories

abc NEWS start here

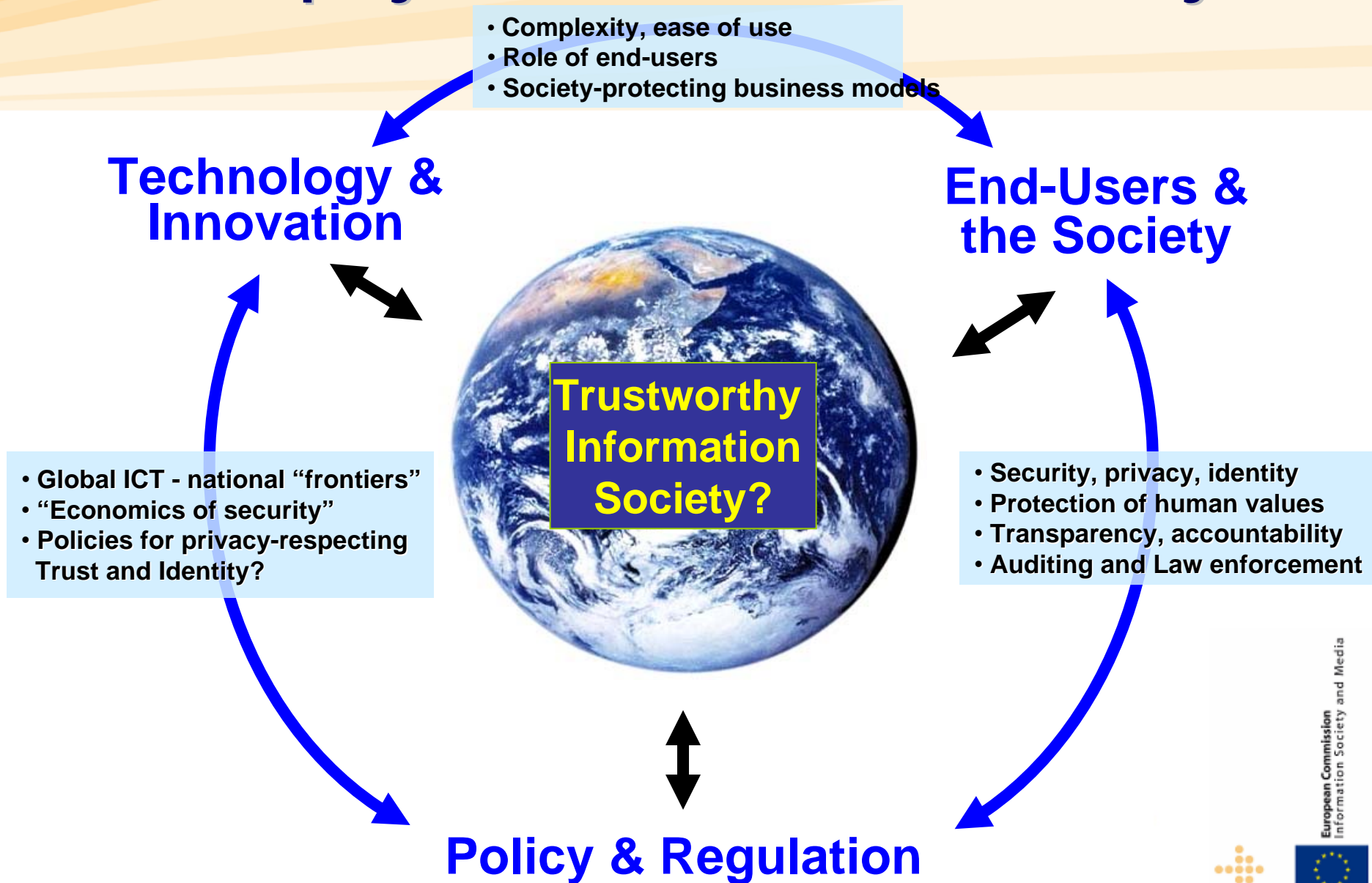
Big Brother Spies on Americans' Internet Data?

The New York Times

Lesson From a Crisis: When Trust Vanishes, Worry



Security, Privacy, Trust Interplay in the Information Society



Globalisation



- Internet global
- No time, location, borders
- Little authentication; Anonymity
- No mapping to state jurisdiction

Local culture and jurisdiction

- State sovereignty
- Law enforcement
- Citizen protection
- Culture and habits



Trust

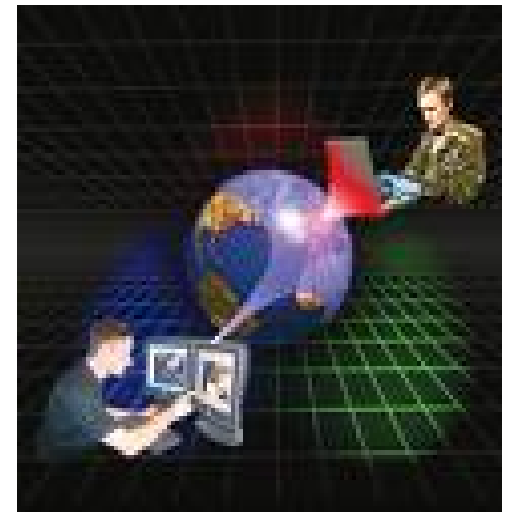
- a three-part relation: ***A trusts B to do X*** based on A's subjective evaluation and highly depending on context
- Basis for decision to go in transaction

Trustworthiness

- Level of trust assigned by A to B to do X
- ***Trustworthy systems***: give measurable guarantees on risks, resilience, QoS, ...

Identity - Identification

- A process approach: claims on ID and access proven to 'relying party'



Privacy Concern in Democratic Societies

- **Essential for freedom**, creating trust and creativity in our society → sustainable growth and social stability
- **Privacy**: default in the design of Trustworthy systems



It took generations to build our democratic values – Europe must foster them and transpose them into the digital age.



RISEPTIS Advisory Board

Research and Innovation in SEcurity, P rivatecy and Trustworthiness in the Information Society

Objective: provide visionary guidance on policy and research challenges in the field of security and trust in the Information Society.

Chair: George Metakides (U Patras, CTI)

Members: Dario Avallone(Engineering), Giovanni Barontini (Finmeccanica), Kim Cameron (Microsoft), William Dutton (Oxford Internet Institute), Anja Feldmann (Deutsche Telekom), Laila Gide (Thales), Carlos Jimenez (Secuware), Willem Jonker (Philips), Mika Lauhde (Nokia), Sachar Paulus (U. Brandenburg, ISSECO), Reinhard Posch (CIO GOV. Austria, TU Graz, A-SIT), Bart Preneel (KU Leuven), Kai Rannenber (U. Frankfurt, CEPIS), Jacques Seneca (Gemalto);

Observer: Peter Hustinx (Observer)

Support: Willie Donnelly (WIT), Keith Howker (WIT), Sathya Rao (Telscom), Michel Riguidel (ENST), Neeraj Suri (U. Darmstadt)
Jacques Bus, Thomas Skordas, Dirk van Rooy (EC)



Recommendation 1: The EC should stimulate interdisciplinary research, technology development and deployment that addresses the trust and security needs in the Information Society.

- Trustworthy network, service and computing environments (incl FI)
- Trust, privacy and identity management frameworks
- Engineering principles and architectures for trustworthiness (metrics, crypto, secure SW, ...)
- Data and policy governance, socio-economic aspects, liability, management



Recommendation 3: The EC, together with the Member States and industrial stakeholders, must give high priority to the development of a common EU framework for identity and authentication management

- Federative, based on MS's eID systems
- Compliant with legal framework on data protection and privacy
- Based on “Laws of Privacy” (user control, minimal disclosure constraint use, justifiable parties, ..)
- Facilitating full spectrum: public admin, banking with strong authentication → simple web activities in anonymity



Recommendation 6: The EC should recognise that, in order to be effective, it should address the global dimension and foster engagement in international discussions

- Global Open Standards
- Federated frameworks for interoperability (travel and ID)
- Global Law Enforcement in the Internet
- Consumer protection for use of global e-services
- Privacy and data protection in global data exchange



With respect for local cultures

