



The Need for Seamless Security in eGovernment Service Provision

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User – oriented Security Issues: the known

- User information **should only be visible** to the proper people, relative to the provided service
- Citizen information **should not be obtained or used** for purposes other than the provision of the service
- **Nobody should be able** to impersonate a user, during the course of service provision
- Information **should not be altered in any way**, during the provision of a service

User – oriented Security Issues: the usually hidden

- All information exchanged during service provision **should be accessible to the user** at any time, at minimal cost
- Security mechanisms should cater for **Pan-European** eGovernment Service provision, allowing for cooperation and change among different organisations worldwide
- **A multiplicity of choices** should be made available to cater for different cultures, languages, modes of operation or user sophistication levels
- The authentication process, the security measures, the trust and logging mechanisms **should not impose or transfer burden** to users
- Most services should be completed on-line, the user only providing only his eID (**one stop, one id, one second**)

eGovernment Service Provision: The complexity in Greece

- Organisational Aspect
 - 18 ministries, 13 prefectures, 52 districts, 1024 municipalities, 691 Public Organisations, 25 Banks
 - 5,500 Governmental “Points of Service”
 - > 2,000 non-interoperable Service Types from Government to Citizens and Businesses
 - > 10,000 Document Types exchanged between Administrations and the public
- Systems Aspect
 - 200 Governmental Internet Portals
 - 1000 Municipal Internet Portals
 - 2,500 Public Administration Back Office Systems
- Non-Governmental Stakeholders aspect
 - 1,000 IT and services companies
 - 750,000 Enterprises, SME’s and VSE’s
 - 11,000,000 Citizens
 - 18,000,000 Tourists every year
 - > 20,000,000 service requests per year (mostly non-electronic, mostly non-interoperable)

Give me some numbers: the eGovernment Simulator

- An analytical, multi-criteria model for simulating user and public sector behavior during service provision
- The model simulates various citizen and business services , calculating and forecasting time, effort and cost
- The eGOVSIM model was used to calculate some user-oriented security indicators during eGovernment service provision

Security – related indicators

- Over the next 30 years, a typical employed, ICT user citizen will:
 - Obtain **100 different sets** of authentication credentials, mostly electronic
 - **Sign 10,000 times**, on different documents, currently mostly manually – gradually shifting to electronically
 - Use his/her credentials not less than **100,000 times**, mostly by inserting data into systems
 - **Rely on his/her own means** for storing, accessing and reproducing documents (**more than 1,000** of which will have to be stored, many of which in paper)

Another example: Trust between systems

Number of systems to be mutually trusted	Number of “trust relationships” to be established
2	1
10	45
100	4.950
1.000	499.500

... there should be another way

So, what is the issue ?

- We need a completely new set-up and orientation if to offer citizens a viable, sustainable and scalable way for tackling security issues
- If we don't do that, security costs for the users may outrun eServices benefits and turn citizens and business away (let them stay with manual)
- We need “seamless” security

Some measures for Seamless Security

- Federated, dynamically composed identity
- P2P and network-based trust mechanisms
- User-adaptive mechanisms for protection
- Citizen-owned virtual, personal, digital repositories
- Utilise the power of multi-channel Web 2.0: Publish, Record, Store, Share on line
- Engage the user in many of the decisions and the solutions
- Follow on major projects and initiatives (STORK, PEPPOL, GENESIS)

Other Activities in Greece ?



- The Greek eGovernment Framework: a standardisation for interoperability, service provision, security and authentication (www.e-gif.gov.gr)
- The Greek Interoperability Centre, a European Centre of Excellence for promoting eGovernment Interoperability in the region (www.iocenter.eu)
- The eGovernment Forum, a think-tank for many eGovernment issues, including security (www.ktpae.gr)

