Cross border co-operation and Interoperability

Yannis Charalabidis
Ass. Prof. University of Aegean
Manager, Greek Interoperability Centre
The Greek Interoperability Centre (GIC)

- A European Research Infrastructure, supported by the FP7 Programme, hosted in NTUA

- The centre aims at:
  - Promoting **Digital Services in eGovernment** in South-Eastern Europe and the Mediterranean
  - Demonstrating state of the art **solutions for Interoperability** in Digital Public Services
  - Contributing to Interoperability **Standardisation and Research**
  - Acting as a **dissemination and engagement** point for research centres, administrations and enterprises
Collaborating Centres of Excellence in eGovernment & eBusiness

Countries with user organisations

Syria
Israel
Palestine
Agenda on Interoperability

• What (is it) ?
• Why (we need it) ?
• How (we can achieve it) ?
• What’s in it for me ?
• What’s next ?
What is Interoperability?

• Interoperability is the ability of two or more systems to collaborate seamlessly, exchanging information and adapting to new behavior, in depth of time.

• Comments:
  – interoperability ≠ integration
  – Interoperability has a “fractal behavior”: it concerns organisations, systems, data, processes from the largest to smallest.
Why do we need interoperability?

• We spent 60 years building information systems, without paying attention to their interconnection.

• Today, more than 40% of the information systems cost is integration and interoperability (Forrester Research).

• Interoperability can cut cost by 45% and execution time by 90% in governmental processes (GIC simulation).

• Connected governance and cloud-based services can achieve service provision in “1 second – 1 stop – 1 cent” for businesses and citizens.
How Collaboration and Interoperability can turn a “introvert” public sector to a citizen-oriented

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<th></th>
<th>1960’s</th>
<th>1990’s</th>
<th>2020’s</th>
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<tbody>
<tr>
<td>Overall Model</td>
<td>Paper-based</td>
<td>Paper &amp; IT</td>
<td>Collaborative IT</td>
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<tr>
<td><strong>Citizen Time and Cost</strong></td>
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<tr>
<td>Citizen Waiting Time</td>
<td>Weeks</td>
<td>Days</td>
<td>Seconds</td>
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<tr>
<td>Citizen “stops”</td>
<td>~ 10</td>
<td>~5</td>
<td>1</td>
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<tr>
<td><strong>Quality of Service</strong></td>
<td>Non defined</td>
<td>Un managed</td>
<td>Managed</td>
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<tr>
<td>Service Accessibility</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
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<tr>
<td><strong>Government Spending</strong></td>
<td></td>
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<tr>
<td>Service provision (Production)</td>
<td>60%</td>
<td>60%</td>
<td>30%</td>
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<tr>
<td>Book keeping, reporting (Mgmt)</td>
<td>35%</td>
<td>25%</td>
<td>5%</td>
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<td>IT Infrastructures (IT)</td>
<td>0%</td>
<td>5%</td>
<td>15%</td>
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<tr>
<td>Service design / citizen collab. (Mrkt)</td>
<td>Low</td>
<td>Low</td>
<td>30%</td>
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<td>Training and Skills management (HR)</td>
<td>Low</td>
<td>Low</td>
<td>20%</td>
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Interoperability in Government: Where?
# The Ingredients of Interoperability

Cooperating partners having compatible visions, and focusing on the same things.

The appropriate synchronization of the legislation in the cooperating MS so that electronic data originating in any given MS is accorded to proper legal weight and recognition wherever it needs to be used in other MS.

The processes by which different organisations such as different public administrations collaborate to achieve their mutually beneficial, mutually agreed eGovernment service-related goals.

Ensuring that the precise meaning of exchanged information (concept, organisation, services, etc) is preserved and well-understood.

The technical issues involved in linking computer systems and services (open interfaces, interconnection services, data integration, middleware, data presentation and exchange, accessibility and security services, ...)

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<th>Political Context</th>
<th>Legal Interoperability</th>
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<td>Legislative Alignment</td>
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<th>Organisational Interoperability</th>
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<td>Organisation and Process Alignment</td>
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<th>Semantic Interoperability</th>
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<tr>
<td>Semantic Alignment</td>
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<th>Technical Interoperability</th>
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<td>Syntax, Interaction &amp; Transport</td>
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Current European Commission Initiatives

EIF 2.0
European Interoperability Framework (EIF) v2.0: the new set of interoperability guidelines for European Member States

SEMIC.eu: The European Semantic Interoperability Centre, an infrastructure for reusing semantic components

NIFO
A National Interoperability Frameworks Observatory, studying the interoperability standards in 27 member states
Cross-border Interoperability

STORK: Secure Identity Across Borders Linked (Pilot-A project for interoperable eID in EU member states)

PEPPOL: Pan-European Public eProcurement On-Line (Pilot A project to facilitate EU-wide interoperable public eProcurement).

SPOCS: Simple Procedures Online for Cross-border Services (Pilot project for the EU-Service Directive)
The Greek eGovernment Interoperability Framework

- **Enterprise Architecture / Organizational Interoperability**
  (Guidelines for Service Documentation, Business Process Alignment & Re-engineering, Legal Issues)

- **Information Architecture / Semantic Interoperability**
  (Guidelines for XML, Standard Schemas, Codelists, Development Tools)

- **Computational Architecture / Technical Interoperability**
  (System & Components Topology, Design guidelines)

- **Web Portals & Multi-channel Access Specifications**
  (Accessibility, Ergonomics, Structure, GCL)

- **Technical Interoperability Specifications**
  (Communication, WS stack, storage standards, vertical standards)

- **Authentication & Security Specifications**
  (eID, Trust levels, authentication mechanisms, encryption)

- **Certification Framework**
  (For organisations, systems, data and people)

- **Training Activities**
  (Skills Management, Training Process, Training Material)

- **Maintenance Processes**
  (Update, Change Management, Versioning Processes)

- **Co-ordination Strategy**
  (Vision and Strategy for Interoperability & e-Government, Goals & Metrics, Maturity Matrix & Roadmap for PA)

- **Co-ordination Activities**
  (Marketing & Comm. Plan, Co-ordination & Acceptance Mechanisms)

**Levels:**

- **“Systems” Level**
- **“Standards & Specifications” Level**
- **“Coordination” Level**
The Greek eGIF today

- Technical, semantic and organisational interoperability standards
- XML Schemas for public documents, government codelists
- An interoperability infrastructure (services registry), for administrations (1,000 services, 500 XML schemas, tools)
- Training Material for public officials and eGIF Experts
- Certification Mechanism (for administrations, industries, practitioners, training centres)
Interoperability: An opportunity for Western Balkans

- United Nations Development Programme (UNDP) developed a study on Government Interoperability Frameworks for Asia-Pacific Countries (2008) with the support of ORACLE and IBM

- Each of the countries continued to develop their own framework, with much greater speed and less risk

- This way, cross-border cooperation is “embedded” in the government standardisation from the beginning

- A similar approach can be followed for Western Balkans, gradually making the area a worldwide case of “cross-border connected governance”
Interoperability
The CROSSROAD Project

• Aims to deliver a new research roadmap for the European Commission, on “ICT for Governance and Policy Modelling” – the global picture

• CROSSROAD, managed by Technical University Athens, follows a truly collaborative approach

• Crossroad organises the eGovernance Summit, in Samos, in July 5-8, 2010

• Participate and propose your ideas for “next generation governance” in www.crossroad-eu.net
The PADGETS project

- Managed by Aegean University, PADGETS is a research project exploiting the use of social media and societal modelling for public services design
- Join at [www.padgets.eu](http://www.padgets.eu)

The ENSEMBLE project

- To start in June 2010, ENSEMBLE project will develop the new European Commission research roadmap for Interoperability and Future Internet systems
- Also, ENSEMBLE will deliver a first vision for Interoperability Scientific Establishment
Thank you for your attention

Stay tuned at

http://t-government.blogspot.com

Email to

yannisx@aegean.gr