Online Service Integration and Public Sector Interoperability

Real Impact for Better Government

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Bahrain, 23-27 June 2013
What is Interoperability?

In the ISA (Interoperability Solutions for Europian Public Administrations) context, interoperability means the facilitation of cross-border and cross-sector information exchange, taking into account legal, organisational, semantic and technical aspects.
The Vision

Efficient and effective electronic cross-border and cross-sector interaction between public administrations.

– share and reuse existing successful eGovernment solutions

– Flexible and interlinked IT systems allow smooth implementation of Community policies and activities.
Government versus citizens

Vertical approach – Ideal for Government

Horizontal approach, public sector interoperability – Ideal for Citizens
Public Sector interoperability

*Trust Based Information sharing Protocol and Security*

Public Sector interoperability is the mix of policy, management, and technology capabilities needed by a network of organizations to deliver coordinated government programs and services.

E-Government Interoperability is the ability of two or more diverse government information and communications technology systems or components to meaningfully and seamlessly exchange information and use the information that has been exchanged.

The internet is a great example of interoperability – numerous devices and applications working together anywhere in the world. Government must ensure that new IT devices, applications, data repositories and services interact seamlessly anywhere – just like the internet.

E-Government interoperability enables one-stop, comprehensive online services for citizens and businesses by linking the diverse services that are offered by different agencies.
Fields of Application

- criminal justice
- public health
- environmental protection
- online tax filing
- integrated government accounting systems
- educational resources
- multiple policy domains in support of a broader citizen need
- ID management
Government interoperability requirements

1. Invest in changes to internal organizational arrangements, practices, and technical resources

2. Create new, or renew cross-boundary relationships; recognize and manage the challenges to network formation

3. Recognizing the existing capabilities and take advantage of existing strengths and focus valuable and limited resources on those capabilities that are missing.
The online services platform offers:

• Infrastructure to support better decisions and strategic constituent services
• Greater transparency and interoperability using open government principles and standards
• Reliability and availability
• High performance, higher productivity
• Security
• Keep future options open
Impact

1. e-government initiatives work primarily on diminishing the time to process each transaction (the vertical vision)
2. interoperability solutions work primarily on diminishing the number of processes or activities (the horizontal vision)

*Deploying e-government systems and at the same time making them interoperable will produce higher gains of scale at the same or even less cost and positive-leverage impact on GDP growth.*
The Economic Impact of Interoperability

“the value and capability of a network expands with the numbers of connections .... When a certain level of connectivity is reached in a complex system, the capabilities that are being unleashed may be far greater than the sum of the parts”
Digital Agenda for Europe – 2020 Initiative

Action 21- Propose legislation on ICT interoperability – Completed

As part of the review of EU standardization policy, propose legal measures on ICT interoperability to reform the rules on implementation of ICT standards in Europe.

What is the problem? Fragmentation of EU-produced technologies and services

Digital devices, applications and services should interact seamlessly anywhere, anytime. Not the case in Europe. The fragmentation of the potential market for EU-produced technologies and services hamper growth in Europe's ICT sector.

Why Action is required: Standards ensure interoperability

Better Europe-wide standards would enhance interoperability and ensure that digital applications and devices work across borders.
Promote appropriate rules for essential intellectual property rights and licensing conditions in standard-setting, in particular through guidelines by 2011.

**What is the problem?**
Standard-setting can give rise to restrictive effects on competition by potentially restricting price competition and limiting or controlling production, markets, innovation or technical development.

**Why Action is required:**
- First, this could reduce or eliminate price competition in the markets concerned, thereby facilitating a collusive outcome on the market.
- Second, standards that set detailed technical specifications for a product or service may limit technical development and innovation. While a standard is being developed, alternative technologies can compete for inclusion in the standard. Once one technology has been chosen and the standard has been set, competing technologies and companies may face a barrier to entry and may potentially be excluded from the market.
- Third, standardization may lead to anti-competitive results by preventing certain companies from obtaining effective access to the results of the standard-setting process.
Digital Agenda for Europe – 2020 Initiative
Action 23- Guidance on link between ICT standardization and public procurement – Delayed

Issue a Communication in 2011 to provide guidance on the link between ICT standardization and public procurement to help public authorities use standards.

What is the problem? Vary specifications for tenders on public procurement

The practices of public authorities across the EU vary greatly when it comes to writing tender specifications for public procurement. In some cases, public authorities find themselves unintentionally locked into particular IT solutions for decades, simply because they failed to draft sufficiently flexible tender specifications allowing for open choices in technological evolution.

Why Action is required: Public authorities lose out

The Commission will draw up detailed guidelines on how to make best use of ICT standards in tender specifications. For instance, public authorities should select standards which can be implemented by all interested suppliers, allowing for more competition and reducing the risk of lock-in.
Digital Agenda for Europe – 2020 Initiative
Action 24- Adopt a European Interoperability Strategy and Framework – Completed

Promote interoperability by adopting in 2010 a European Interoperability Strategy and European Interoperability Framework.

What is the problem? No standard-setting
Europe does not yet reap the maximum benefits from interoperability. Weaknesses in standard-setting, public procurement and coordination between European public authorities prevent digital services and devices working across borders as well as they should.

Why Action is required: Get greater interoperability throughout the EU
When establishing National Public Services, there is a risk that different Member States opt for solutions which are incompatible with one another. New electronic barriers, so-called "e-barriers", emerge - impeding the proper functioning of the internal market. Member States and the Commission should do more to pre-empt the emergence of these new e-barriers and the resulting market fragmentation by getting greater interoperability of public IT systems throughout the EU.
Examine the feasibility of measures that could lead significant market players to license interoperability information.

What is the problem?
Companies which dominate the ICT sector achieve wide market penetration of their products and services. If their products are incompatible with those of other brands, users feel locked into the dominant company's product range, for fear that any new devices they purchase will not be compatible with their existing equipment.

Why Action is required: Get greater interoperability throughout the EU
Companies should provide interoperability information about their devices and applications. With this information available, smaller enterprises have the opportunity to develop applications and services compatible with those offered by dominant market players. The end result will be an extremely competitive market and a happy consumer.
Member States should apply the European Interoperability Framework at national level by 2013.

What is the problem? No internal virtual market due to interoperability problems
In the virtual world barriers against the internal market are raising, mainly due to interoperability issues.

Why Action is required: European Commission encouraging Member States to adopt interoperability laws
At the end of 2010 the Commission adopted a communication on the "European Interoperability Framework". The next step is: Member States adopting a national interoperability framework, in line with the European one. To this end, the programme "Interoperability Solutions for European Public Administrations" will be monitoring the progress within the Member States, while in parallel will implement the European Framework.
Digital Agenda for Europe – 2020 Initiative
Action 27- Implement Malmo and Granada declarations – On track

Member States should implement commitments on interoperability and standards in the Malmö and Granada Declarations by 2013.

• The **Malmö Declaration** commits EU public administrations to promote open standard to ease the path for the new products. It also commits to align national interoperability frameworks with applicable European frameworks.

• The **Granada Declaration** complements the Malmö Declaration on eGovernment by encouraging the development of more efficient interoperable public services that promotes the re-use of public sector information, increase the efficiency of government and lead to a measurable reduction in administrative burdens on citizens and businesses as well as contribute to a low-carbon economy.

**What is the problem? Absence of common standards**

**Why Action is required : Guidance for standardisation**
# Measuring Information Society in Albania

## ICT Development Index (IDI) – ITU

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## e-Government Development Index (eGDI) – United Nations

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Measuring Information Society in Albania

Networked Readiness Index (NRI) – World Economic Forum

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Source: World Economic Forum
# E-Government Projects/Initiatives - Main Developments

## 2003-2004
- First ICT strategy approved.
- GovNet started.

## 2005
- Master Plan for E-Schools Approved. All 2000 Public schools are equipped with PC laboratories (27,014 PC+Laptops) and broadband Internet connections. ICT curricula are adopted.

## 2007
- ICT main priority for the Albanian Government at the National Strategy for Development and Integration.
- Establishment of the National Agency for Information Society.
- E-Business Registration. One stop shop for business registration.

## 2008
- New Law on «Electronic Communications».
- National Civil register was digitalized and biometric documents were issued later in 2009. PKI digital certificate
- E-taxes system established.
## E-Government Projects/Initiatives - Main Developments

### 2009
- E-Procurement. All public procurements are run electronically.
- E-Customs.
- E-Cabinet Meetings. E-Akt
- E-Licensing. One stop shop for Permits and Licenses.
- E-Treasure.

### 2010
- Public Access Points (PAP). All 550 Post Offices offer free Internet access throughout Albania.
- Minister for Innovation and ICT.
- Govnet new services offered.
- Forth GSM mobile operator enters the market.

### 2011
- Number Portability System for Cellular and Fixed-line telephony established.
- Telemedicine System established.
- ProTIK Innovation Center, MoU Signed.
- Albanian Computer Emergency Response Team (AL-CIRT) Established
E-Government Projects/Initiatives - Main Developments

2012

- Albanian Country Action Plan for the Open Government Partnership (OGP) officially accepted
- Online Portal for Judiciary System Established
- One Stop Shop for Notaries
- E-Cabinet 2 introduced
- Broadband Strategy Introduced
- Digital Switch-over Strategy approved
- ProTIK ICT and Resource Center Established
- Third 3G License issued to Eagle Mobile
- New amendments on Law 9918 on «Electronic Communications» passed in the parliament.
- International Internet Capacity will be increased tenfold
- Public Access Points will be extended from 550 to 1200
- Government Datacenter is operational
Starting with e-Albania the first e-Gov Portal
Government Gateway (GG) – Albania Core Architecture for Interoperability

GG (Government Gateway) is the core architecture based on which it will be possible to integrate all internal governmental electronic systems in Albania.

• The platform is a Microsoft product implemented before even in England and Czech Republic and rely on “Single-Sign-On” mechanism. It is composed by the modules:
  – Registration and Enrollment Module
  – Transaction and Messaging Module
  – Remote Adapter

• Actually they are already integrated on e-albania portal the services
  – e-Matura (Registration and admissions in university)
  – e-DL (Application for driving license)
  – e-Tracking (Tracking the cases followed by PPA, NRC or NLC)
Albania Information society – Interoperability

ICT INFRASTRUCTURE

MITIK
leading the process and HL Committee

All line ministries, NAIS, other public institutions, stakeholders.

NAIS/ML SP/Local gov. etc
E-gov.

ML SP QKR/QKI/NAIS
E-business

ML SP Local auth./NAIS
E-health

ML/schools ppp/NAIS/NGOs
E-education

ML NAIS/ALCIRT
E-trust

ML SP/Courts/NAIS
E-justice

ML SP/Local authorities
E-culture
New e-Government Infrastructure & Services

• National Agency on Information Society has planned to build the new e-Government Infrastructure and Services in 4 phases as following:

  1. Build and reconfigure physical fiber network that connects all the GoA Institutions. *(Planned to finish in 2013)*

  2. Build the network nodes and services point, Implement the physical security, administration and monitoring, Build the base Centralized Electronic Directory Services, starting to implementing first Data Center Services. *(Central NOC under implementation. Sites in 2013)*

  3. Implementing Interoperability Service Layer. *(Planned to finish in 2013)*

  4. Implementing the full Data Center Services and G2G/G2C/G2B services. *(Planned to finish in 2015)*
Principles for Developing a Policy Framework for interoperable, citizen-centric services

1. Ensure top-level ownership
2. Focus on business change, not technology
3. Ensure cross-government coordination
4. Map the current environment
5. Priorities
6. Don’t re-invent wheels
7. Promote competition and innovation in the IT supply market
8. Don’t assume, you have all the skills in-house
9. Drive change
10. Be prepared for the long haul
What are the key points to remember about e-government interoperability?

• **No government will achieve interoperability in one big step.** Securing interoperability is a process of many incremental activities over time. Hence, a significant infrastructure of people, technology and knowledge needs to be in place to create, use and revise the e-government interoperability document - be it a GIF.

• **The lead agency** should be charged and empowered to lead the interoperability development and implementation process.

• The process of developing and revising the GIF must be **open and inclusive**. This will help create a better document and ensure support for the document among those who will eventually implement it.

• **Open standards are essential.** One cannot achieve e-government interoperability through the technical issues only. The issue of interoperability emerged as a result of the proliferation of independent e-government projects, which often have limited coherence and remain largely uncoordinated. To truly enable interoperability across a government, one does not start with technology. One starts with the government’s strategic framework and the vision and goals of its leaders.

• e-Government interoperability, through standards or architecture, is a technically demanding undertaking **that requires significant commitments from government leaders.** But the benefits – the ability of a government to act as one enterprise, managing spiraling ICT costs, providing integrated citizen services, and the condition for greater citizen participation through greater transparency, in short **good governance – outweigh the costs.**
Recommendation

- Use open standards
- Incorporate existing standards in a larger context
- Stimulate re-use of proven standards
- Redesign administrative processes, make the best use of available technology. This is also an opportunity to make services more user-centred
- Keep administrative procedures independent from technology
- Coordinate and manage the eGovernment initiative
- Keep track of developments in the wider community. For instance, changes in privacy legislation may impose requirements to the provision of some e-service
- Reduce the amount of data to be collected by using well-defined data dictionaries and data structures;
- Ensure information security: prevent unauthorised access to systems and, in the case of highly confidential information, secure each record (or even each component) individually
- Enable wide access (user-friendly interfaces, access for the disabled, foreign language support, etc.).
Issues to be addressed

• The architecture of public service must design what is needed, not limited by the available technology
• Effective architecture, it will accelerate the delivery of services to market and lead to cost savings
• Architecture should support the overall vision of flexible public service. It would be unfortunate if governments adopt an architecture that limits its ability to respond quickly to changing conditions.
Thank you for your attention!

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