

Interoperability of e-government services

Valbona DHJAKU
Credins Bank
Tirana
vdhjaku@gmail.com

Nevila XOXA
Albanian Academy of Science
Tirana
nevila.xoxa@akad.gov.al

Klodi BERBERI
Tirana Bank
kberberi@gmail.com

Abstract

The aim of this paper is to present a high-level operational model for a solution that can improve significantly public services in Albania. The solution will increase the efficiency of public administration, quality of their offered service and saves a lot of time to people that today have to wait in queues. The paper brings an evaluation of problems that may be solved, critically analyze the implications and propose solutions. The core of the solution is to build an interoperable platform that will allow government units to exchange data by using networks. By using an interoperable platform, the institutions can exchange data for their internal needs and for people applying for services. Having IOP platform running, a portal can be built over it to offer different online services at one single entry for public. In a single entry we can offer to public a standard view of online services and reduce in maximum the security risks.

1. Implementation of interoperability solution for public services in Albania

The public services that can be in focus of this analyze are numerous, but to illustrate the case it will be used just one of them. A personal experience of time consuming and bureaucratic story trying to renew the Driving license led to controversial thoughts about the concrete process and not only. In this process there are many problems that can be solved through an internetworking solution. The process requires going in several offices to complete it: completing paper forms and applying to driving license office, retrieving certificates of clearance from police and court offices, a paper from municipality about living address and medical test.

This is a common problem that can be faced from everyone when applying for a new driver license, renewing or replacing a lost or stolen one. People are wasting a lot of time going in different state offices as those are not communicating to each other. The public administration is

offering an unsatisfying service and in the meantime the society is facing a lot of staff costs and administrative expenses.

The databases of these units: register of civilians, addressers, driving licenses, auto school data, police clearance and court clearance, medical test results can offer us the chance of building an interoperability solution. This solution can offer online application for driving license applicants and offer the possibility of exchanging the data between institutions. This way is quicker, safer in the point of originality of data and cost saving in terms of administrative expenses. Going further, the model of service can be used for other public services as well. Making it more common reduces the costs of interoperability interfaces. Concretely, the civil register interface will be in the core of these services and applying a charge on every request for info can make it profitable.

2. Driving license service for public

It is important to state that the issue in discussion is very wide and complex and cannot be fully covered in just a coursework but this paper will be an attempt to treat it bringing some concepts on how it can be done. The paper will try to briefly design a solution that may help public services in general and will stand analyzing more in detail one of the services; driving licenses issuing. In this paper will be presented several problem stating today in public services in Albania and it will be done some analyses on how these problems can be solved in the current status of telecommunication technologies.

In order to properly evaluate the case it have considered:

- All my knowledge and experience in those services
- Research on available public materials
- Interviewing friends and colleges that have similar experiences
- Interviewing people working in the unit that manages Driving Licenses (DPSHTRR)

All public services in Albania are offered today separately in offices responsible for that service. On government web sites are offered only information and only

in very few cases you can find forms and instruction how those have to be filled. The only way for submitting request for services and getting services is by visiting offices. In most of the cases when you submit a request for a service you need to present several other documents issued by other offices. Since the offices are working independently the applicant need to visit all other offices in order to collect the required documents. For example in Driving License case that is the service we will see more in details, together with the form of application we need to visit:

- A photo shop to prepare several personal photos as per the required standard
- Civil status offices to get Certificates of birth
- Court offices to retrieve certificates of clearance
- Prosecution office retrieve certificates of clearance
- School to get confirmation of completed school
- Municipality office for getting confirmation about living address
- Medical clinic to do medical tests.

All those steps have significant costs financially and socially. The financial cost are coming as we are spending our valuable time and expenses for public administrative offices. The social cost is coming as many people are wasting their time on those processes meantime they could use it for doing better things in society.

3. E-Government services

The proposed solution to improve the situation is a web portal to public having behind interoperable services platform. The figure 1 present what is my concept those services. We can find on it that we benefit the facility of getting the services online when possible and also exchange of information electronically between institutions avoiding the need to visit office by office and ensuring better the originality of data.

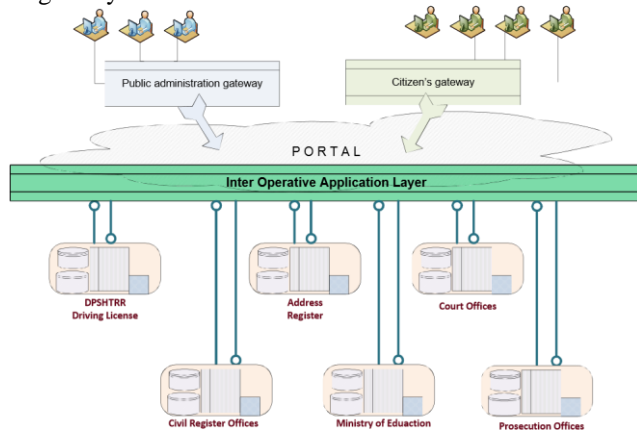


Figure 1: Services

For building the e-service related to driving license services it is required to start with creation of national multifunctional portal for Albania which contains all the

information that is required by the applicant of the driving license. The portal will be developed to work over a standardized national interoperable platform. Currently in Albania there is not anything like that up and running but as Albania is ambitious to join the EU we are always looking to advance in compatibility with EU. Studying the case we find that EU countries have already built government IOP platforms and standardized multifunctional portals. Those portals are called eGovernment (short for electronic government) and are provided to improve government services, interactions and transactions with citizens, businesses, and other entities of government.

All European countries are working and presenting eGovernment initiatives, mainly related to the improvement of governance at the national level. Significant eGovernment activities are taking place at European Commission level visible in Action Plans and reflected in an extensive list of e-Government Fact Sheets produced by the European Commission. On those days the European Commission is supporting actively eGovernment services. According to the European Commission the “eGovernment is the use of Information & Communication Technologies (ICTs) to make public administrations more efficient and effective, promoting growth by cutting red tape. This is something which anyone who has spent hours waiting in line in a government building can appreciate [ECW11].” The e-Government can be implemented both at the national level and in supranational level. European Commission has assigned responsible persons in high level of administrate to prepare the strategies of e-government services. Other structures are responsible to implement the strategies through several programs and activities.

Two of the most important initiatives are the IDABC and ISA programs. The European’s Commission says that:

“IDABC stands for Interoperable Delivery of European eGovernment Services to public Administrations, Business and Citizens. It takes advantage of the opportunities offered by information and communication technologies:

to encourage and support the delivery of cross-border public sector services to citizens and enterprises in Europe to improve efficiency and collaboration between European public administrations to contribute to making Europe an attractive place to live, work and invest [ECW09].”

ISA – Interoperability Solutions for European Public Administrations – is a European Commission program that sets out to improve electronic cooperation among public administrations in EU Member States [ECW16].

The program facilitates electronic cross-border and cross-sector interaction, enabling the delivery of electronic public services and ensuring the availability of common solutions.

As a conclusion we find that e-Government services are well known and in EU and we do not need to invent everything on them but we have to start working from current state of them [Nov08]. A valuable detail is also that European Commission is funding also projects in this area and it can give a financial help to Albania too.

4. Interoperable Platforms - IOP

Up to now we have presented the front view of e-Government services. What stays on the core of eGovernment services is the Interoperable Platform that we will refer as IOP. As it is shown in figure 1 in my understanding IOP is like a highway where all services will go through to meet each other. Even this is a very simplified view we find that Interoperability is a very complex issue related to technical aspects such as data network infrastructure and data exchange formats, but also related with data contents issues [Abu05]. Having in consideration this complicity we will have a quick view on it as concerned to our object. The IOP has to be built as national wide platform and considering the international standards on ICT. Building of the Interoperability chain is one of the first things to be done and on it has to be thought about current infrastructure and what is expected to be in the future. The use of IOP can be for between institutions and within them too. For building a better and more efficient IOP involvement of stakeholders in the process is very important [Ala05]. Some of keywords to be in mind in IOP design are: Interoperability, Standards, Openness, Security, Privacy, Accessibility, Availability, Scalability, Maintenance, Market Support etc.

To further extend studying the case on figure 2 is presented an IOP design idea and concerns that have to be considered. Again as part of e-Government services even the IOP are specific per country a lot of experience can be used from EU for Albanian implementation. Currently in the new articles and seminars from EU we are looking to improve semantic interoperability in European eGovernment systems. The objective is achieving better collaboration between European public administrations relating to the meaning of the information. As Albania is an aspirant country to join EU it is crucial to follow the EU on their implementations.

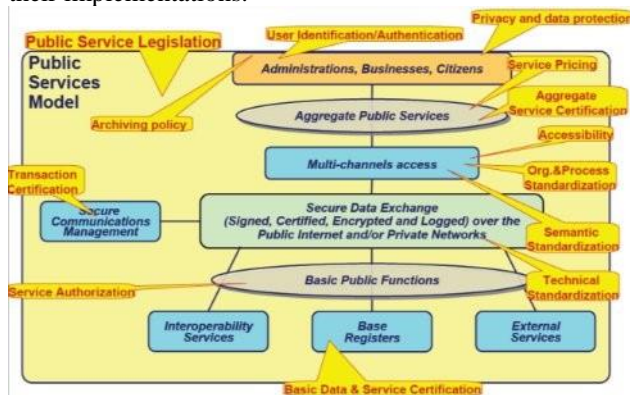


Figure 2: An IOP design idea and concerns

5. Driving License e-Services

Let's come back to our practical issue with driving licenses e-services. The e-services will use elements of the e-government infrastructure specified above in this

assignment. Development of these elements is a precondition to start the e-services. Assuming that the IOP is up and running, we are going to analyze implementation of this service in this interoperable platform and offered to public through public gateway of e-Government.

Let go and see some of the main issues that comes out in this project:

5.1 Feasibility, are we in the proper technology and social environment stage that we can implement such a solution?

This evaluation has three areas, Albanian government ICT development, and social development in technological area to use those services and service by self. Albanian government is putting high priority on investment in ICT area. Several significant points can be listed for those investments and developments on e-Government services to consider them valuable. E-Services can offer a better service to public, are very helpful in the anti-corruption strategy of government, we are going online with EU Administration developments strategy and we can get benefits of EU funds.

Regarding the users of this service, considering that internet usage is massively used today we find that the service can be offered everywhere.

The answer for the third issue will be taken at the end of our analyses as we check all the issues.

The analyses will start with the current paper based workflow of the driving License application and verifying the problems and concerns. As described at beginning of this session the Driving license renewal starts with visiting seven other offices to collect necessary document for application: A photo, Certificates of birth, certificates of clearance (Court office), certificates of clearance (Prosecution office), completed school diploma, living address and medical tests. Easily can be noted a lot of efforts to collect all these documents, time consuming and financial cost as all of them are given as per specific fee-s. In following picture (figure 3) are presented the workflow processes as those are running now in Government offices. The improving of those processes is one of our considerations too.

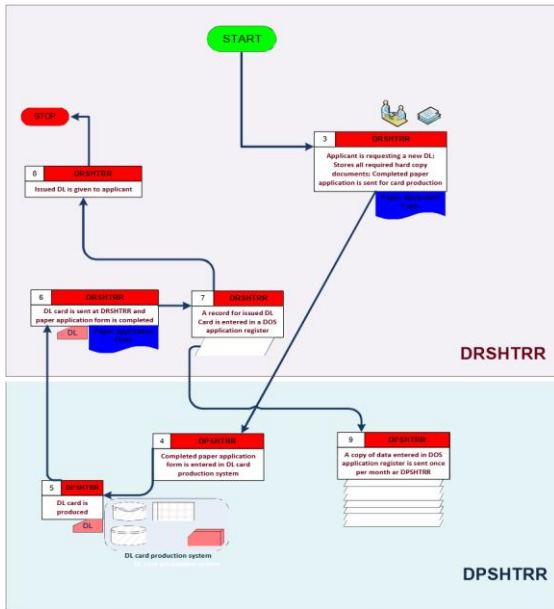


Figure 3: The workflow processes in Government offices

5.2 Proposed solution, problems it will solve

The proposed e-Service solution will allow the applicant to apply directly to online service without the need to visit all offices. Using the Interoperable platform as shown in figure 1 the Driving license authority will be able to communicate with other government offices and retrieve civil status, living address, clearance status and completed schools. Also this service gives a lot of possibilities for improving appointment scheduling and notification on processing status saving time in unnecessary visits or queues of people.

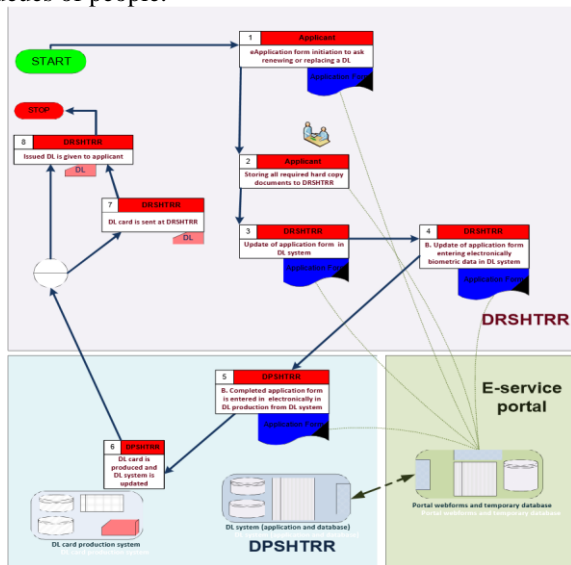


Figure 4

5.3 Who can benefit

This is a common service for many people in Albania and we find currently over 100 thousand people have a driving license. Many people are required to utilize time to time services related to driving license as new DL, renewing DL, lost DL, damaged DL, theft DL, address or other info changes etc.

5.4 Security issues

This is an important issue but interesting to be mentioned also. As we have noted the e-Service will be offered together with other e-Government service through a single entry port. It will allow us to use eSignature. Much like one signs a document with a pen in the offline world, electronic signatures deliver a way to sign documents in the online world. But without seeing a person sign the document, how can you prove it is the right person? This is where the Electronic Signature Directive comes in. In the past only hand-written signatures were legally valid but now the law accepts electronic signatures in Albania. A system of electronic signatures that work across Albania delivers the electronic signatures of public services to businesses and citizens.

5.5 Future vision, possible future developments

What is proposed in this paper is just for starting a new concept of Public Services in Albania using information and communication technologies [Bru05]. The vision of this service is to simplify the public services in lower cost and contribute in quick growth of country. Although the vision is clear and many public services can be found there are some the path is not easy. The e-services will be successful if we are able to simplify the processes and get participations [Bet05]. To go at these results we need to do a change in the public sector to consider the data and knowledge management, social-economic environment, add value to services and built reliable and secure systems.

5.6 Financial aspect

In the presented idea is not possible to make a good evaluate of the financial benefits or losses but some benefits we can find on it: a lot of valuable working time saved to applicants, less administrative costs as less office staff will be required, less offices and office expenses. IOP will remove the need certificates and paper exchange between offices as the commission can be collected anyway. A real example of an e-Service that can show the financial benefits published in European commission internet site:

In Denmark, electronic (or 'e') invoicing saves taxpayers €150 million and businesses €50 million a year. If introduced all over the EU, annual savings could add up to over €50 billion. In Italy, e-procurement solutions cut over €3 billion in costs. Full take up of electronic invoicing and procurement (purchasing) in Europe is predicted to have a huge impact in Europe, saving some €300 billion a year.

5.7 Risks and assumptions, potential drawbacks

The project needs to go through several difficult processes and decisions. Evaluating the details of current services and the proposed services we can identify the following concerns:

- Clear and applicable change management process
- Changing and adopting the Driving license system with new needed requirement
- New instances of database and data input might be needed; New outputs too
- Restructuring of the workflow
- Other institutions in cooperation are required to follow the new workflow
- Changing other systems in order to be adopted to new processes from manual management to electronic signalization
- The necessary modifications to legislation should be done before launching the new service
- Etc.

5.8 Legal background

As we have to use new type of documents, signatures, verification and implement changes in workflow legal changes are required.

5.9 Supporting IT systems

Clearly the most important thing on the solution to be provided is the IT systems and networking to be used. We are getting the initial values of driving license e-services from the e-Government platform that it will be put. As better it is developed more easy it will be for configuring our service on that platform, more simple will be for users and better it will interoperable with other services under eGovernment.

5.10 Other concerns:

Definition of roles and processes of this service; involved stakeholders, actors; Administrative procedures etc.

6. Conclusions

Having a Public e-Service up and running to process issues related to driving license may facilitate the life of many people. It can be seen in all steps as a very efficient solution and in time for developing and having it welcome in Albania. The proposal was mostly in high level but clearly presents that the challenge of implementing an eService like the one described is achievable. Working for the proposal was difficult and enjoyable at the same time. It was difficult as it covers a complex and big problem that involves a lot of people, institutions and requires expertise from different fields. This must be considered when implementing the solution. The team must be wide

expertise and in some cases maybe it will be required the help of international experts. It was enjoyable to write for the case as it can really be a solution in avant-garde and can improve the life of many people.

References

- [ECW11] European Commission Website. Europe's Information Society. Available:
http://ec.europa.eu/information_society/tl/soccul/egov/index_en.htm
- [ECW09] European Commission Website. IDABC. (2009)
Available:
<http://ec.europa.eu/idabc/en/chapter/3.html>
- [ECW16] European Commission Website. Interoperability Solutions for European Public Administrations.
Available: http://ec.europa.eu/isa/ready-to-use-solutions/index_en.htm
- [Nov08] S.Novaretti. European Interoperability Framework. 2008
- [Abu05] Aichholzer, G, Burkert, H (eds) (2005) "Public sector information in the digital age: between markets, public management and citizens' rights", Edward Elgar, Cheltenham, UK
- [Ala05] Alabau, A. (2004) "The European Union and its eGovernment Development Policy"
- [Bru05] Bruel, J.D. (2005) "Bringing government closer to citizens"
- [Bet05] Betz, F (2005) "eGovernment: Democratic re-enforcement vs. increased economic efficiency?"