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Evaluation of e-government efforts in Europe

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UER: Management des entreprises publiques

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Résumé

Ce texte propose une évaluation des efforts nationaux européens en matière de gouvernement électronique. Dans un premier temps, il présente la politique de la société de l'information de l'Union Européenne. Ensuite, il dresse un bilan de l'analyse des sites web de 15 pays européens, et approfondi l'analyse par le biais de trois études de cas, à savoir l'Estonie, la France et l'Italie. Les politiques de l'information ainsi que les portails Internet de ces pays sont analysés. Le texte conclut que l'on assistera très probablement à l'émergence d'une politique commune, influencée par les directives européennes, dans le domaine de la société de l'information.

Abstract

This paper introduces an assessment of e-government efforts in Europe. First, it presents some key information on Europe and especially the European Union, thus setting the stage and framework of the current e-government efforts. In a second section, the document presents a short analysis of 15 European government websites. Furthermore, it presents and analyses three case studies, namely Estonia, France, and Italy. Finally, the paper concludes that one will probably witness the emergence of an unified ICT policy in Europe in the years to come.

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1. INTRODUCTION

This report addresses recent “e-government efforts in Europe”. But in order to understand these efforts, it is necessary to briefly recall the key elements of Europe and especially the European Union, which sets the overall framework e-government efforts. In a second section, we will then present a short analysis of 15 European government websites. The third section presents the three case studies we have selected, i.e., Estonia, France, and Italy. Finally, we will conclude with an analysis of these three cases.

1.1 Europe, an overview

Since the end of the 2nd World War, Europe lives under the pressure of an integration process in order to create an European community. Six countries (Belgium, Germany, France, Italy, Luxembourg and the Netherlands) initiated the process and joined from the very beginning. Today, after four waves of accessions (1973: Denmark, Ireland and the United Kingdom; 1981: Greece; 1986: Spain and Portugal; 1995: Austria, Finland, and Sweden) the European Union has 15 Member States and is preparing for the accession of 13 Eastern and Southern European countries. Currently, the Union embraces today more than 370 million people.

Fig. (1) : Map of Europe ; in yellow the European Union countries, and in pink the candidate countries



The European Union is neither a new State replacing existing ones nor is it comparable to other international organisations. Its Member States delegate sovereignty to common institutions representing the interests of the Union as a whole on questions of joint interest. The Union principally acts in order to establish European citizenship; to ensure freedom, security and justice; to promote economic and social progress, and to assert Europe's role in the world. All decisions and procedures are derived from the basic treaties ratified by the Member States and are managed by 5 institutions, i.e., the *European Parliament* (elected by the peoples of the Member States), the *Council of the Union* (composed of the governments of the Member States), the *European Commission* (driving force and executive body), the *Court of Justice* (compliance with the law), and the *Court of Auditors* (sound and lawful management of the EU budget).

1.2. European Union's information society

The European Union's policy for the information society, which was developed since the mid-1980s, is based on the following three main policies:

- The telecommunications policy of the European Community Treaty (TEC)
- The support to technological development in information and communication technologies (ICT) of the TEC
- The promotion of trans-European networks in the transport, energy and telecommunications sectors, as stipulated in the TEC

In the 1990s the Union information policies was given a new impetus. In June 1994, The Union launched its first Information Society Action Plan called "Europe's way to the Information Society". Following this plan, the European Union portal <http://www.europa.eu.int/> was launched in February 1995, aiming to be an information resource. The site is nowadays very complete and informative, and can be consulted in 11 European languages. In December 1999, the European Union launched « eEurope – an information society for all », a political initiative to ensure that the Union fully benefits from the changes which the information society is bringing. The key objectives of the initiative are « to bring every citizen, home and school, every business and every administration into the digital age and online; to create a digitally literate Europe, supported by an entrepreneurial culture ready to finance and develop new ideas; and to ensure that the whole process is socially inclusive, builds consumer trust and strengthens social cohesion »¹. To support this initiative, a clear legal framework has been established.

In 2001, "eEurope" was followed by "eEurope +", an action plan aiming to assist in accelerating the reform and the modernization of the economies of the candidate countries through the use of NICTs. "eEurope +" encourages capacity and institution building, improves overall competitiveness, and allows the candidate countries to leverage their strengths to the advantage of their citizens.

The "Communication from the commission to the Council and the European Parliament concerning eEurope 2002"², give us some indicators concerning the actual development of the Union's information society:

¹ <http://www.europa.eu.int/scadplus/leg/en/lvb/l24221.htm>

² http://europa.eu.int/information_society/eeurope/news_library/pdf_files/impact_en.doc

- 93% of the households have a telephone and Internet penetration at home is showing encouraging levels of growth. In the half year between March and October 2000 penetration rates at home increased from an average of 18% to 28%. Technologies like ADSL (1.1% of EU Internet households) and cable Internet modems (7.8%) are not yet widely widespread
- The overall total of Internet users in the EU comprises about 40% of the population
- The percentage of schools equipped with computers and Internet connections is high throughout Europe. An Eurobarometer survey carried out in February 2001 found that on average, for educational purposes, 94% of European schools were equipped with computers and 79% connected to the Internet
- On average, 23% of workers in the EU have received formal computer training. Although there are large differences between the Member States, with particularly low levels of formal training in some Member States, 45% use computers in their jobs
- Data of 12 countries on the number of *public internet access points* (PIAPs) indicate that, in most Member States, there is less than 1 PIAP per 10.000 inhabitants. Usage figures from Eurobarometer indicate that less than 3% of Europeans use public access points
- The use of online government services is developing in the Union. About 25% of Internet users have accessed government websites. However most interactions are passive - i.e. information search and downloading. Only 10% of Internet users have used public websites to submit forms. The level of interactivity varies by Member State

2. NATIONAL WEB SITES

We have analyzed the websites of 15 European countries (i.e., Austria, Belgium, Denmark, Germany, Ireland, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, UK and Yugoslavia) along a given set of variables and values (see Annex No.1). All countries are from Western Europe, and most of them are already members of the European Union, with the exception of Norway, Switzerland and Yugoslavia. In addition to these countries, we have also analysed the three case studies (Estonia, France and Italy) based on the same criteria (see Annex No.2), though in more detail.

This rapid review shows the presence of some common elements between the countries. First, The majority of the portals are governmental. They mainly present the governmental structure and give descriptions and information about the institutions. Most of the sites are therefore informational. Nevertheless, we observed a trend towards an increased level of interaction. Some sites start to put forms on-line and to offer the possibility to citizens to request services on-line. Netherlands and Sweden are at the forefront of this trend. Only France and UK already have a high level of interaction and offer the opportunity to complete transactions on-line.

Concerning some information on the values, we observed that all the sites analyzed are daily updated, and that all the sites are available in the national language and in English, at least for the main pages. The forms of feedback and participation vary between the countries, but the majority offers at least surveys, e-mails, phone numbers and addresses. Generally, the user is able to communicate electronically with the government agency, even though generally the agency does not communicate back with him.

Globally, we observe that with the exception of the Nordic countries, the most developed portals belong to the countries which were present from the very beginning of the Union (Belgium, Germany, France, Luxembourg and the Netherlands), but with the exception of Italy. One can say that these countries are the richer and the most developed, but we think that there are some common elements that they share since the 1950s (the Rome Treaty) which influences their specific practices. In addition, these countries are generally also the first ones to implement the Union's policies.

3. CASE STUDIES

We have chosen to analyze in more depth the cases of Estonia, France, and Italy, because we thought these three countries could give us an interesting and varied overview of European e-government efforts.

3.1. ESTONIA

A. Overview of Case studies - Brief description of case studies selected - Rationale for selection

Estonia is geographically located in Northeastern Europe and borders the Baltic Sea in the West, the Gulf of Finland in the North, Russia in the East and Latvia in the South. Estonia is one of the smallest among the countries that are going to access the European Union, with only 1'361'000 habitants. Estonia has a relatively high level of information technology, Internet awareness and infrastructure. Mobile communication is very popular in Estonia, and the proportion of Internet users is high in relation to the population (300 000 for 1.4 million people). Furthermore, the number of Estonian websites (.ee) exceeds one million and the Estonian IT market is the biggest in the Baltic.

We have chosen Estonia as a case study because we thought it could be interesting to analyze a country, which is currently accessing Europe. This accession period is characterized by the significant penetration of ICTs into the social, economic and political life. In addition, since the early 1990s, Estonia has made a name for itself in matters relating to e-democracy, which let us suppose that interesting elements concerning electronic governance could be present.

B. Description of web project

Single Point Entry (SPE) is a 1998 project purely oriented to the information content that aims to design a Single Point Entry,³ and which should be the central port to the Estonian Government. SPE has the following five main purposes:

1. SPE is the highest part of the public government Internet system, and it acts as a virtual mirror of the structure of the government organizations.
2. All the institutions belonging constitutionally to the Republic of Estonia are placed in the first menu block. For each institution, users can find contact information, function, structure and links to the original WWW.
3. Information about all the government organizations are presented in the SPE.
4. Separate areas of SPE point to the known Internet services of government organizations and introduce several new ones.
5. SPE supports the work of civil servants.

³ <http://www.riik.ee>

In the years following the implementation of the SPE, significant improvements have been realized. In order to maximize e-mail interaction, for example, every employee in the system got an email alias Firstname.Lastname@riik.ee, which is automatically redirected to the current e-mail address of the person.

C. Decisions/strategies involving the project's development

In the 1990s, Estonia decided to renew the ICT field clearing the outdated soviet-made hardware and starting to buy new equipment and build new infrastructure. It is at this time that some Estonian ICT companies were born and that actual use of Internet in Estonia started (1991) with the establishment of a dialup connection from the Estonian Government and the State Chancellery. One year later, in 1992, the Estonian Government established a direct Internet connection, and in 1994, Estonia became one of the first countries in the world with a public government web service. In 1996, the government launched an information technology program called Tiger Leap.⁴ Tiger Leap was a national target program with the overall objective to promote the educational system in Estonia in the rapidly changing world with introduction of modern information and communication technology. Today, all the schools are connected to the web, and Tiger Leap has often been used as a synonym of information society development.

1998 is an important year for the development of Estonian information society. At the beginning of the year, the document *“Principles of Estonian Information Policy”* has been approved by the Parliament of Estonia. The “Principles of Estonian Information Policy” serve as a basis for an action plan aiming to establish an “information society”. The document presents information policy as a mandatory element of public policy, which will ultimately lead to an increase of the overall welfare of the society. The document is constantly refers to the information policy of European Union, and underscores Estonia’s need to act in accordance with the EU. Furthermore, the document points to the importance of a public private partnership in order to establish an efficient information society. The information society policy should further develop the public sector and the government machine, as well as support the development of private sector. A few months after the approval of the document, the State Chancellery initiated the project *“Single point entry for the Government Information”* (SPE) supported by the Open Estonian Foundation.

Still in 1998, the government launched Village Road⁵ (*“Küla Tee”* in Estonian). Village Road is an information technology program of rural data communications. This project aims to ensure permanent Internet connection for all of the 247 municipalities. In addition, the project would provide at least 85 % of work places in self-governments with computer, e-mail address for every self-government official and a web page for every local government. By the end of 2000, over 239 local governments (96 %) had Internet connection. Following Village Road, the Estonian government launched yet another information technology program called Küla Tee II , which is a national project for the establishment of Internet connection in Estonian public libraries, providing them with workplace computers and software. Although the goal of Village Road was achieved and practically all local governments have permanent internet connection, for ordinary country people proper Internet connection has remained inaccessible. Several public and half-public Internet points have been established at local governments, private enterprises, tourist information points, computer classrooms of schools,

⁴ <http://www.tiigrihype.ee>

⁵ <http://www.kylatee.ee>

as well as libraries, but they were mainly located in bigger centers and generally had quite a doubtful technical and financial basis. Kula Tee II aimed to remedy this gap. Currently leased-line public Internet access points are open at more than 180 libraries over Estonia.⁶

D. Description of the government's emphasis on a particular web site function or project relate to the social or economic issues facing the country

The entire Estonian information policy is characterized by the transformation following the end of Soviet rule and the candidacy for entry into the EU. Because of the past Soviet era, Estonia had a significant need to modernize its information infrastructure and technical equipment, as well as its public sector, i.e., through a full-fledged eGovernment program. As for the integration into the EU, Estonia is taking part in the “*eEurope +*”.

E. Legislative background

Since 1997, the Databases Act limits the introduction of new directions in data processing, and since 2000 the Digital Signature Act rules the utilization of electronic signatures. Nevertheless, the most important Estonian act on ICTs is the Public Information Act. The Public Information Act entered into force on January 2001 and regulates which information belonging to the administrative apparatus can be offered to the public and what are the means for doing so. The purpose of the law is to ensure that the public and every person has the opportunity to access information intended for public use and to create opportunities for the public to monitor the performance of public duties.

F. Project costs

In 1993 the Estonian government established a coordination structure for IT development as well as a comprehensive financing system for allocating the funds. These funds amount approximately at 15 millions USD per year and constitute only 1% of the state budget per year. This is quite modest if we consider that Finland, for example, allocates 3% of the state budget.

G. Implementation challenges

There is significant political will in behalf of the Estonian government to promote as well as to lead the process towards the information society. And this will prevails over all kind of obstacles caused by the transition situation of Estonia and the Soviet past.

H. Innovative elements of project

The opportunity offered to the citizen to introduce proposals for legislation via Internet (<http://tom.riik.ee>) and to use the Internet as a forum for discussing proposals, constitutes an

⁶ I. Siil, 2001, p.6

innovative effort to turn the digital service for citizens and political participation into a sustainable and innovative “eGovernment”.

I. Key lessons

Estonia is an example where government policy and public administration projects have had a decisive role in the development of an information society. The current eGovernment program in Estonia is of a very good quality and, despite the financially limited resources, can be qualified as serious. The Estonian eGovernment offers a balance between an important digitalization of public services and some forms of electronic participation.

J. Future status

In 2001 the government launched another program, the nation wide e-citizen project⁷ (eKodanik), which focuses on developing cooperation between people and the public sector through Internet. The idea underlying this project is that citizens got used to Internet based services thanks to the private sector but they will soon expect to get the same quality of services from the government and the public sector. The project proposes a vision for Estonian citizens in 2004: in 2004, all local governments in Estonia should be connected to a network offering most of the public sector services to citizens and enterprises on line, on a 24hour-7 day basis. The access to the Internet should be available in kiosks situated in every village of the country. 60% of the population should be using Internet on a daily basis.

The citizen is seen as the key to public administration development and thus, the project is based on the dialogue with the citizen/customer. The main goal is to stimulate him to communicate his needs and satisfy them with requisite services and information. The governance dialogue should be improved in order to empower the citizen in the democratic process.

⁷ <http://www.riik.ee/ekodanik/ecitizen.rtf>

3.2. FRANCE

A. Overview of case studies - Brief description of case studies selected - Rationale for selection

France is one of the biggest European country with more than 60 million inhabitants and a surface of 544 435 km². France has a quite high level of information technology. Today, 25% of French citizen regularly use Internet. The computer is the daily work instrument for more than the half of working population, and it is an information means for one home out of three. 55% of the young French (aged between 15 and 24) use the computer at least once per week. 62% of the whole population has a mobile phone.

We have chosen to analyze France because its web site (www.service-public.fr) is very well known in Europe for its good quality, and because France is one of the key players of the EU. France was also one of the first countries to introduce a nation-wide information system, the so-called “Minitel”.

B. Description of web project

Service-public.fr was born as part of the 1998 government action “Préparer l’entrée de la France dans la société de l’information” (preparing the entry of France in the information society), and it is part of a larger trend of modernizing public services. The site was realized by the “Direction de la Documentation Française” with the collaboration of the office of Prime Minister and of Public Function. The aim of “service-public.fr” is to facilitate the access to information and the administrative tasks. In order to accomplish this, 2700 practical sheets are available, as well as 1600 question and answers and 1100 forms.

C. Decisions/strategies involving the project's development

In January 1998, France launched a government action program,⁸ in order to develop an information society. The program focussed on the six following priorities:

1. ICTs in education;
2. A new cultural policy for new networks;
3. ICTs helping the modernization of public services;
4. ICTs as an important instrument for enterprises’;
5. Take up the challenge of industrial and technological innovation; and
6. Support the emergence of an efficient regulation and of a protecting framework for the new information networks.

Priority No.3 “ICTs helping the modernisation of public services” is of significant interest to us. The purpose of this priority is to use ICTs in order to improve the relationships between the public administration, the citizens, and the enterprises, and to increase the internal efficiency of the public administration. The French State also aims to play a key role in developing the French presence on the World Wide Web. In this perspective, some actions are planned, namely to put all the public information on the web, to develop new Internet

⁸ “Préparer l’entrée de la France dans la société de l’information”, janvier 1998

services, and to create a public website of administrative information. This last project was initially called Admifrance, but during its implementation became service-public.fr. In the program of 1998, Admifrance was supposed to be a general administrative information site, linked to some practical forms and to a directory of the Public Function. In order to complete Admifrance, each public service of the administration should have obtained a web address prior to 2000. Internet was intended to become the standard for the French administration. In this perspective, the utilization and the legal framework for the digital signature should have been determined. Priority No.3 also gave to the French government the possibility to elaborate an Internet public access policy. The purpose was to provide more than 1000 postal offices with public access by the end of 1998. An important ICTs educational campaign was also planned, inside the administration as well as for the French citizen. Overall, priority No.3 was thought as an instrument to help France to enter the information society and to modernize the State.

D. Description of the government's emphasis on a particular web site function or project related to the social or economic issues facing the country

The main purpose of the French Government was to make France enter the information society in order to catch up with other industrialized countries and to become competitive. At the same time, the French government wanted to build an information society for the entire country, avoiding any digital divide. These goals were pursued by the program of 1998, namely by the first three priorities focusing on modernization of public service, on education and culture.

E. Legislative background

France has a quite significant ICT legislative background. One of the first laws adopted on this topic was the one of 13.05.2000 concerning the digital signature. In September of the same year, a ministerial decree opened the local network of France Telecom to the competition, enabling the diffusion of high-speed connection to Internet via ADSL. In November 2001 a law on daily security entered into force, allowing the judges to monitor criminals' uses of ICTs. Currently under discussion is "Projet de Loi sur la société de l'information" (project of law on information society), elaborated in July 2001, which aims to grant the liberty of on line communications, to improve the security of the Internet, and to clarify the legal framework for eBusiness.

F. Project costs

In order to make "on line administration" a success in the process of State modernization, the French government invested almost 4 billion EUR, between 1997 and 2001. In addition, a budget appropriation of 1 billion EUR was set aside in 2001 for the computerization of government agencies.

G. Implementation challenges

The 1998th program defined the implementation process. The governmental guidelines for execution aimed to insure the coherence of public action and to associate in it every actor of the information society. The official involvement of the government and particularly the Prime Minister has contributed considerably to the removal of obstacles delaying the development of Internet in France.

H. Innovative elements of project

Service-public.fr is the only public service based web site that we know. It is not a government portal but a public function portal. Furthermore, it is citizen oriented and thus very easy to surf and to use. The real “plus” of Service-public.fr is the possibility to find the totality of the forms online and to complete some transactions.

I. Key lessons

In 1997, the government and its officers could not be reached via the Internet. The government set the priority of 1998 program to make government services available online. Today service-public is recognized as one of the best public sites in Europe and it reports more than 600'000 hits a month. Furthermore, the number of web sites in the French public sector is still growing (in May 2001 there were 3578 sites). Through the official involvement of the government, the Prime Minister and an important press campaign, France has attained its objectives.

J. Future status

Up to 2005, each French citizen should be able to access the whole public services on line and should dispose of a “mon.service-public.fr”, a personalized site allowing him to process all the administrative tasks on line. In addition, the French government acts in order to improve the electronic protection of personal data, to spread the Internet access all over the country (more than 7000 Internet access will be provided in the public spaces before 2003), and the ICT education for the French public officers and citizens. In this respect, a Passport for Internet and Multimedia will be delivered in public multimedia spaces to everybody who has some basic Internet and computer knowledge. The accent would also be put on the ICTs as a mean to enhance the democratic debate.

3.3. ITALY

A. Overview of case studies - Brief description of case studies selected - Rationale for selection

Italy is a peninsula of 57 millions inhabitants, situated in Southern Europe extending into the central Mediterranean Sea, and sharing North borders with France, Switzerland, and Austria. Italy has a quite high level of information technology. Today, 21% of Italian families have a computer and 33% of them have an access to Internet. 30 Italians out of 100 use Internet and the 42% of Internet users exploit government online services.

We have chosen Italy as a case study because it is a country that aims to become a model in regards to the ICTs. Italian Post's online services (<http://www.poste.it>) are for example considered as one of the best in Europe.

B. Description of web project

The web project was born in November 1999, available at www.palazzochigi.it¹⁰. One year later, in October 2000, the project was improved and became www.governo.it. Governo.it aims to be the reference point to access the activities of the whole Italian government. The final purpose is to make the government more transparent in order to better work and serve the citizens. Governo.it is focused on government agencies rather than the intention of citizens, but it is a temporary portal, which will be eventually substituted by "e-Italia" (citizen focused).

C. Decisions/strategies involving the project's development

In 1997 the Presidency of the Ministries' Council adopted a document "Promuovere lo sviluppo della società dell'informazione in Italia" (promoting the development of Italian information society). The document assumes that the entry of ICTs in the daily life influences the whole state dynamic and namely the concept of citizenship. In this respect, Italy needs to implement policies aiming to develop a favorable environment for the information society. In order to succeed in this goal, the Italian government put forward 10 main priorities:

- A. Transform the communication sector from a monopoly into a free market;
- B. Exploit the full effectiveness of existing networks;
- C. Set up high quality technological infrastructure;
- D. Contribute to the development of business activities in ICTs;
- E. Develop the familiarity with ICTs;
- F. Favor the creation of new services and the production of national contents;
- G. Improve the public services operations;
- H. Optimize the impact of ICTs on unemployment and competitiveness;
- I. Orient support policies to establish new industries in the less industrialized areas;
- J. Orient the development of infrastructure and services to the needs of small business.

¹⁰ Palazzo Chigi is the building hosting the activity of the Presidency of the Ministries Council

Once this first step achieved, the Italian government should concentrate on the realization of the following ten instruments in order to develop an active information society:

1. Computer education and alphabetization
(Investing in technological education and on languages; increase the access to ICTs and thus the competitiveness of the country);
2. Develop research programs;
3. Improve the public administration
(This instrument implies an internal restructuring of the public administration, the equipment on new infrastructure and an important instruction phase);
4. Promote new business and create employment opportunities in the ICTs sector;
5. Adapt laws to financially sustain investments and innovation to the ICTs;
6. Develop Internet and eBusiness;
7. Adapt laws on privacy and security;
8. Give value to the national cultural heritage;
9. Develop multimedia and technological centers; and
10. Reduce the digital divide.

Three years later, in June 2000, an action plan eGovernment focusing only on the point No.3 was adopted. This plan is concerned only with public administration and ICTs, and it aims to improve the operational internal efficiency, to digitalize all the public services, and to enlarge the users' access to public administration information. This action plan is citizen centered: all the services are organized in order to facilitate the interaction with the citizens. The concept of an administration service portal was introduced. This idea was presented again in December 2001 in the guideline for the digitalization of the administration in 2002. This document stressed the urgency of the question and set 6 priorities for 2002:

1. Improve the service to the citizens and the business;
2. Favor efficiency and low cost management;
3. Reinforce the information structure;
4. Develop technological knowledge among the State employees;
5. Develop the diffusion of innovation throughout the country; and
6. Introduce new instruments to coordinate and manage initiatives.

The main purpose of the document is the creation of a national portal "e-Italia", which should be the central and the only point of entry to the Italian public administration.

D. Description of the government's emphasis on a particular web site function or project related to the social or economic issues facing the country

The Italian information policy is marked by the need to overcome three structural weaknesses in regards to the exigencies of development of information society: the aged educational system, the lack of a national production of applied software, and the inefficiency of the financial system. For this reason, the Italian web project was not a priority. Only now, that the economic and structural bases have been set up, the government will focus on the web services, as the institution of the department for innovation and technology in 2001 indicates.

E. Legislative background

The «INDICE del d.P.R. n. 445/2000¹¹» of 2000 rules all the ICTs questions: the transmission of information, the digital signature, electronic ID documents, and others more.

F. Project costs

The eGovernment action plan of June 2000 budgeted 3.3 million EUR only for the conception and the creation of the citizen portal. We do not have budget information regarding the other projects.

G. Implementation challenges

The important action of Italian government in projecting, promoting as well as leading the process towards the information society has contributed significantly to prevail over some obstacles caused by the structural condition of the country.

H. Innovative elements of project

Governo.it presents some very interesting elements. First, it offers an entry to each Italian ministry or governmental service. Due to the big dimension of Italian public administration this service is very important. Second, the site offers a huge panel of forms; each ministry has a link to its “modulistica” (forms section), and the access to the forms is therefore very easy. In a certain way, governo.it combines the quality of a government portal with the ones of a public service portal.

I. Key lessons

The Italian information society is developing only now, later than most of the other European countries. Nevertheless, the brief history of Italian information society policies shows us some relevant elements that are fundamental prerequisites to the development of a solid information society. In a certain way, Italy could be seen as an example for the type of countries. that are willing to enter the information society.

J. Future status

Italy’s vision stresses the need for continuing organizational reforms to public administration, and a desire to adopt a service oriented administration favouring information exchange among its parts and with the citizens. In this regard, there is lot to do in the future, because the most important part of the 1997 and 2000 programs is still to come. For the near future we expect the creation of “e-Italia”.

¹¹ http://www.giustizia.it/cassazione/leggi2000/dpr445_00.html#Articolo 1

4. CONCLUSIONS

The following analysis will compare Estonia, France, and Italy by using the same criteria detailed above. This comparison will help us identify the main trends or differences.

With regards to the **web project** analyzed, Estonia and Italy present a governmental portal while France has a public service portal. This difference can probably be explained by the particular situation of the country, and in particular by its information policy.

With regards to the **decisions/strategies involving the project development**, we can find some common points. First of all the date of origin: Estonia is probably the first country to officially develop an ICT policy at the beginning of the 1990s, but it is only in 1998 that the SPE and other important programs to develop information society are launched. France initiates its government action program in January of the same year, and Italy adopts a similar document at the end of 1997. In the countries analyzed, the process of official development of the information society began in 1998. It is relevant to know that it is in 1998 that the EU published the *“Green Book on information of public sector in information society”*. We can therefore imagine that the European policy has influenced the member and candidate policies.

A second element that is present in all the case studies concerns the steps in the implementation of the governmental programs. Every country stated the importance of focusing on education for the ICTs. In Estonia, Tiger Leap began in 1996, 2 years before the development of the single entry portal. In France, ICT in education was the first priority of the 1998 program, and in Italy it was one of the first as well. The result of this strategy is that, today, the majority of the schools in the three countries are connected to the web and the young generations daily surf on it. We can find a similar trend concerning public access to Internet.

The **government’s emphasis on a particular web site function or project related to the social or economic issues facing the country** is obviously different in each case. Nevertheless, if Estonia is a special case due to its candidate situation, we can find some similarities between France and Italy. In both countries, the objective of developing an information society was a means to catch up with other industrialized countries already active in the ICTs sector, the main purpose being to increase each country’s competitiveness. This lets us suppose that there are some countries that started their information society policies before 1998; it could be interesting to identify them and see who are the leaders and the “market drivers” in the sector.

All three countries have a **legislative background** on ICTs. France has an extremely developed one and Italy has just started a legislative program in this sense. Again in this sector, the EU Directives influence the countries’ decisions.

The **project costs** are quite different: Estonia has a small ICTs budget, while France and Italy have a significant one. We can imagine that the amount of these budgets will still increase in the coming years, due to the finalization of e-government project and the implementation of e-citizen projects.

As for the **implementation challenges**, we observe a common trend among the three countries. In every country, the existence of a leadership deeply involved in the promotion

and development of the ICTs has considerably helped implementation. The role of government is very important for the success of the project, namely in the beginning, when presenting the program to the citizens and informing them.

Each country has a different **innovative element of the project**. Estonia's TOM (Today I Make Decision) is the most original one, and it was awarded in November 2001 a European Commission prize at an e-government conference. As seen previously, the aim of TOM is to enhance the population's participation in the state's decision-making processes. On TOM, citizens can submit ideas, guidelines, thoughts, and comments on draft legislation. Later on, ideas that have found support among users will be submitted by a Prime Minister's resolution to the respective agencies and should be acted upon. TOM offers thus an efficient form of electronic participation to the citizens.

The innovative element of service-public.fr is the entire site. It is actually a real online public service desk, which is very efficient and attractive. We can find something similar concerning the Italian portal, its innovative element being represented by a special link for each ministry to online forms.

The analysis of the **future status** shows the existence of a main trend towards involving the citizen. Estonia launched an e-citizen project. France works on a better access to Internet for citizens and hopes to offer them a personalized site (mon.service-public.fr), permitting to process all the administrative tasks on line. Italy, despite its delay, works on the creation of a citizen portal e-Italia. In the second part of the 1990s, we witnessed the emergence of e-government policies and next year we will witness a redefinition of them based on citizens' reactions. We can imagine that at that time, the government portals will be more interactive than informational and, as in e-business, the customer/citizen will be at the heart and the engine of the process. We also should assist to a shift of importance from digitalization of public services to an increasing electronic participation.

Overall, our analysis shows the existence of some major trends or lessons, which could probably easily be extended to the majority of the European countries due to the EU influence on its members as well as its candidates. Given that the technical and educational gap between the countries will have to be filled, we can predict the emergence of a unified ICTs policy in Europe in the years to come.

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6. ANNEXES

Annexe No.1: Analysis of country websites

FIELD	POSSIBLE VALUES	TYPE
Web site address	URL	Text
Form of government	Federal, confederation, parliamentary democracy	Text
Level of Interaction	1. Descriptive Information 2. Information and email for feedback or survey 3. Printable forms 4. Submit forms and request service 5. Complete transaction	Number
Frequency of maintenance	1. No maintenance 2. More than a year 3. Less than 6 months 4. Less than a month 5. Daily	Number
Form of feedback and participation	1. Survey 2. Email 3. Online opinion poll 4. Phone number 5. Address 6. Email subscription & updates 7. Online forum registration	Number
Privacy	Privacy statement	Yes/No
Search capabilities	Search engine	Yes/No
Handicap accessibility	Option for enlarging text (?)	Yes/No
Languages	1. Native language(s) 2. English 3. Both	Number

AUSTRIA

1	Web site address	http://www.austria.gv.at/
2	Form of government	Republic
3	Level of interaction	1,2,3,4
4	Frequency of maintenance	5
5	Form of feedback and participation	2,4,5,6
6	Privacy	No
7	Search capabilities	Yes
8	Handicap accessibility	No
9	Languages	German and English (3)
10	Web site description	Very informational web site, simple presentation, possibility to download documents, to submit online forms (e.g. Meldestelle NS-Wiederbetätigung)

BELGIUM

Web site address	http://www.belgium.fgov.be/
Form of government	Federal / parliamentary monarchy
Level of interaction	1,2
Frequency of maintenance	5
Form of feedback and participation	2,4,5
Privacy	No
Search capabilities	Yes
Handicap accessibility	No
Languages	Dutch, French, German, English (3)
Web site description	Quite complete description of the institutions, reports available, questions can be addressed by e-mail

DENMARK

1	Web site address	http://www.denmark.dk/
2	Form of government	Parliamentary democracy / constitutional monarchy
3	Level of interaction	1,2
4	Frequency of maintenance	4
5	Form of feedback and participation	1,2,4,5
6	Privacy	No
7	Search capabilities	Yes
8	Handicap accessibility	No
9	Languages	Danish, English. French, Spanish & German only partially (3) Very brief incomplete information, no documents available. Forms, documents etc. only available on the Danish language site (www.danmark.dk) -> impossible to determine interactivity level...
10	Web site description	

GERMANY

1	Web site address	www.bundesregierung.de
2	Form of government	Federal Republic
3	Level of interaction	1,2,3,4
4	Frequency of maintenance	5
5	Form of feedback and participation	2,4,5,6
6	Privacy	No
7	Search capabilities	Yes
8	Handicap accessibility	No
9	Languages	German, English, French, Spanish
10	Web site description	Good information, simple design, many cross links to other federal institutions, forms can not be submitted online (but printed and sent)

IRELAND

1	Web site address	http://www.irlgov.ie
2	Form of government	Republic
3	Level of interaction	1,2,3,4,5
4	Frequency of maintenance	5
5	Form of feedback and participation	1,2,4,5
6	Privacy	Yes
7	Search capabilities	Yes
8	Handicap accessibility	No
9	Languages	Gaelic and English (3)
10	Web site description	Good information and far-reaching interactive possibilities (special government link called e-government), possibility to apply online for a driving license etc.

Luxembourg

Web site address	http://www.gouvernement.lu
Form of government	Parliamentary democracy / parliamentary monarchy
Level of interaction	1,2
Frequency of maintenance	5
Form of feedback and participation	1,2,4,5,6
Privacy	No
Search capabilities	Yes
Handicap accessibility	No
Languages	French, English (3)
Web site description	Few information available, more e-government services planned but not yet realised

NETHERLANDS

1	Web site address	http://www.overheid.nl/
2	Form of government	Parliamentary Democracy / Constitutional Monarchy
3	Level of interaction	1,2,3,4
4	Frequency of maintenance	5
5	Form of feedback and participation	1,2,4,5
6	Privacy	Yes
7	Search capabilities	Yes
8	Handicap accessibility	No
9	Languages	Dutch and English (3)
10	Web site description	Attractive site design, very informational, under-sections (for citizens, investors, tourists etc), English version is abbreviated

NORWAY

Web site address	http://www.norge.no
Form of government	Constitutional monarchy
Level of interaction	1,2
Frequency of maintenance	5
Form of feedback and participation	1,2,4,5
Privacy	No
Search capabilities	Yes
Handicap accessibility	No
Languages	Norwegian, English, French, German, Spanish (3)
Web site description	Very low interaction level, available information is scarce

Portugal

1	Web site address	http://www.infocid.pt/
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2	Form of government	Republic
3	Level of interaction	1,2,3,4
4	Frequency of maintenance	5
5	Form of feedback and participation	2,7
6	Privacy	No
7	Search capabilities	Yes
8	Handicap accessibility	No
9	Languages	Only Portuguese
10	Web site description	Quite informational, few interactive possibilities (but e.g. virtual simulation of taxes), no printable forms, no direct links to ministries, no foreign language.

SPAIN

1	Web site address	http://www.administracion.es/
2	Form of government	Republic
3	Level of interaction	1,2,3,4
4	Frequency of maintenance	5
5	Form of feedback and participation	1,2,4,5
6	Privacy	Yes
7	Search capabilities	Yes
8	Handicap accessibility	No
9	Languages	Spanish, French, English (3)
10	Web site description	Quite well-developed, many printable documents available, quite informational website

SWEDEN

1	Web site address	http://www.sweden.gov.se
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2	Form of government	Parliamentary
3	Level of interaction	1,2,3,4
4	Frequency of maintenance	5
5	Form of feedback and participation	1,2,4,5
6	Privacy	No
7	Search capabilities	Yes
8	Handicap accessibility	No
9	Languages	Swedish, English (3)
10	Web site description	Lots of information available in Swedish; English section is smaller. Quite far-reaching interactive options, good informational material for citizens.

SWITZERLAND

1	Web site address	www.admin.ch
2	Form of government	Federal Democracy
3	Level of interaction	1,2
4	Frequency of maintenance	5
5	Form of feedback and participation	1,2,4,5
6	Privacy	Yes
7	Search capabilities	Yes
8	Handicap accessibility	No
9	Languages	German, French, Italian, Rumantsch, English (3) Well-structured informational site, interactive gate is planned and should be finished by 2005, interactive forum only for administration partners. Note: federal institutions (cantons) offer interactive services.
10	Web site description	

UNITED KINGDOM

Web site address	www.ukonline.gov.uk
Form of government	Parliamentary monarchy
Level of interaction	1,2,3,4,5
Frequency of maintenance	5
Form of feedback and participation	1,2,4,5,6,7
Privacy	Yes
Search capabilities	Yes
Handicap accessibility	Yes (option for clearer text, fewer graphics)
Languages	English (2)
Web site description	Very informative web site, very far-reaching online and interactive options (such as passport request or online subscription for driving tests, fishing licences, tax forms, online announcement of smaller crimes to the police etc), good presentation, effective search tools.

YUGOSLAVIA

1	Web site address	www.gov.yu
2	Form of government	Federal Republic
3	Level of interaction	1,2
4	Frequency of maintenance	4
5	Form of feedback and participation	1
6	Privacy	No
7	Search capabilities	No
8	Handicap accessibility	No
9	Languages	Serbo-Croatian, English (3)
10	Web site description	Very few information material, only comments to the webmaster are possible, no addresses or telephone numbers, no online forms or any other kind of interactivity.

Annex No.2: Analysis of the three cases

FIELD	POSSIBLE VALUES	TYPE
Web site address	URL	Text
Form of government	Federal, confederation, parliamentary democracy	Text
Level of Interaction	1. Descriptive Information 2. Information and email for feedback or survey 3. Printable forms 4. Submit forms and request service 5. Complete transaction	Number
Frequency of maintenance	1. No maintenance 2. More than a year 3. Less than 6 months 4. Less than a month 5. Daily	Number
Form of feedback and participation	1. Survey 2. Email 3. Online opinion poll 4. Phone number 5. Address 6. Email subscription & updates 7. Online forum registration	Number
Privacy	Privacy statement	Yes/No
Search capabilities	Search engine	Yes/No
Handicap accessibility	Option for enlarging text (?)	Yes/No
Languages	1. Native language(s) 2. English 3. Both	Number

ESTONIA

Web site address	http://www.riik.ee/ http://www.gov.ee http://www.riik.ee/
<u>Main entry point/portal</u>	
Form of government	Parliamentary democracy
Level of interaction	1,2,3,4
Frequency of maintenance	Daily (5)
Form of feedback and participation	2,4,5
Privacy	No
Search capabilities	Yes
Handicap accessibility	No
Languages	Estonian, Russian, English (3)

Technical sophistication indicators

Resident and corporate taxes	Texts of taxes law. On the tax board's web site (http://www.ma.ee) lot of forms are available
Employment/job	Contacts of all state employment offices at Estonian Labour Market Board (www.tta.ee)
Pension/social security	All the policies and the laws are on the page of Estonian Ministry of Social Affairs (www.sm.ee)
Personal documents	Forms of Application/Extension for a temporary Residence Permit, as well as for a Work Permit

Web site description

- **Description of the main page:** at the centre there is a map of Europe showing Estonia, as well as some geographical and political information on the country. On the sides, there are the links to the main topics: Institutions, State agencies, Politics, Other countries, Press releases, Search engines, Web services, Media, Catalogues. At the top of the page, on the right you can choose the language, and on the left you can access a search engine, a database or sign a guestbook or send an e-mail to an Estonian institution ("write")
- English just for the main pages, most of the forms and the pages concerning offices are in Estonian

- *The level of technical sophistication can be considered as middle, the web site proposing some downloadable forms but being mostly informative*
- *Law acts in Estonian, as well as European's law acts in English*
- *Opportunity for the citizens to introduce proposals for legislation via the Internet and to use the Internet as a forum for discussing the proposals (<http://tom.riik.ee>)*
- *The site offers several publicly accessible and searchable full text web databases*
- *If you don't know the Ministry corresponding to the service requested you hardly will find the web page corresponding to the service*
- *The site doesn't offer a good design or variety. This results from the government information policy, which estimate that government web sites should prefer content, information and fast navigation to design*
- *The whole system is built on UNIX, using only free, open source software*
- *The site opened in 1998*

FRANCE

Web site address	http://www.service-public.fr http://www.elysee.fr http://www.premier-ministre.gouv.fr
<u>Main entry point/portal</u>	http://www.service-public.fr
Form of government	Republic
Level of interaction	1,2,3,4,5
Frequency of maintenance	Daily (5)
Form of feedback and participation	2,4,5,6
Privacy	No
Search capabilities	Yes
Handicap accessibility	No
Languages	French, English, German, Spanish (3)

Technical sophistication indicators

Resident and corporate taxes	Printable forms available (“impôts, taxes et douanes” on the main page)
Employment/job	Link on the main page (“emploi, travail”), from which you can access an employment forum and subscribe on a “looking-for-a-job” list
Pension/social security	Printable forms and information available from a link on the main page (“retraite”)
Personal documents	Link on the main page (“papiers”). No printable forms but information in order to facilitate and speed the procedures. Also link to the ministry of interior (www.interieur.gouv.fr)

Web site description

- **Description of the main page:** on the left side of the page there are the links to “annuaires” (directories), texts of law and dossiers, opportunities to work in the public administration, and to the pages for professionals and enterprises. At the centre of the page there is a search engine and all the links to citizen’s services. On the top of the right side of the page there is the language choice. Below, there are the links to the news, the agenda, and the news letter.

On the bottom of the page there are the links to information on the site, a map of the site and to help. It is also possible to send a request

- *The level of technical sophistication can be considered as middle-high, the web site offering lot of downloadable forms and the possibility to complete transactions*
- *Most of the links are on the main page, very easy to surf and good access to information and transactions*
- Service-public.fr is the main entry portal for French citizens and is a web site which is not only informative, like www.elysee.fr or www.premier-ministr.gouv.fr, but very interactive and citizen's focused
- The site opened in October 2000

ITALY

Web site address	http://www.governo.it http://www.palazzochigi.it http://www.governo.it
<u>Main entry point/portal</u>	
Form of government	Parliamentary democracy
Level of interaction	1,4,5
Frequency of maintenance	Daily (5)
Form of feedback and participation	2,4,5,6
Privacy	No
Search capabilities	Yes
Handicap accessibility	Yes
Languages	Italian (1)

Technical sophistication indicators

Resident and corporate taxes	Printable forms (www.agenziaentrate.it , modulistica) as well as general information (delays, contacts, ...)
Employment/job	The ministry of employment and social policies (www.minwelfare.it) offers a job fair online (e-Labor) and lot of general information concerning the employment situation in Italy
Pension/social security	The ministry of employment and social policies (www.minwelfare.it) proposes all general information concerning this topic and offers an online centre of contact for social solidarity
Personal documents	Lot of printable forms are available online (www.interno.it , modulistica), e.g. form to get the Italian citizenship

Web site description

- *Description of the main page: on the left side there are the links to the main topics: Berlusconi, the government, the ministries, press releases and dossiers. People can also subscribe to a newsletter or visit virtually the government building. On the bottom, there is a site map, a search engine and some links to national and international institutions. On the top of the page there is a search engine and the possibility to customise the web site. At the centre of the page there are recent news. On the right side of the page, there*

are some links to special dossiers relevant to the update Italian situation. On the bottom there is the possibility to download the news letter and to subscribe.

- *The level of technical sophistication can be considered as middle, the web site offering lot of downloadable forms but not allowing complete transaction*
- *Possibility to customise (My site)*
- *The language (only Italian) could be a problem*
- If you don't know the Ministry corresponding to the service requested you hardly will find the web page corresponding to the service
- The site opened in November 1999, available at <http://www.palazzochigi.it>. One year later, the site was improved and in October 2000 <http://www.governo.it> was born