

ELECTRONIC SERVICES OF EGOVERNMENT IN THE EUROPEAN UNION COUNTRIES

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***Abstract:** This article deals with eGovernment (electronic public administration) on the level of the European Union. There are steps described, which initiates European Union, notably through the European Commission, which are confronted with the achievements of individual Member States. The result is a comprehensive look at the current state of eGovernment services in the European Union countries.*

***Keywords:** eGovernment, Public Administration, European Union, Electronic Services, Information Society, Portals*

1. Introduction

eGovernment means using the tools and systems by the Information and Communication Technologies (ICT) to provide better public services to all citizens and businesses. The ICT is already widely used by the government bodies, just as in the enterprises, but eGovernment involves much more than just the tools. Effective eGovernment also involves rethinking of the organization and processes and, so that the public services are delivered more efficiently to the people who need to use them. Implemented well, eGovernment enables all citizens, enterprises and organizations to carry out their business with the government more easily, more quickly and at lower cost. eGovernment is closely linked with changes of the public administration system in the country. [2]

2. Public Administration in the European Union

The public administration of each Member State has its own specifics, but the goal must be the same, especially to improve the quality of life while respecting the principles of sustainable development and simultaneously enhance the efficiency and quality of the public services. The European governance has to achieve the European standards and has to apply the principles of the ‘*acquis communautaire*’, which means the sum of the European Union (EU) mandatory for all its members and the superior national law. On the basis that the individual national systems of the public administration are included the so-called European administrative space, in which a number of new administrative relationships appear. The public administration however falls within the exclusive competence of the individual EU Member States. [5]

The public administration in all EU countries at the beginning of the 21st century has to adapt to the requirements of information society and the use of modern ICT. There must be also a new view on functions of the public administration because of the emergence of new problems. This is mainly because of the members of national and

ethnic groups who come to the European Union countries from various states, especially from Turkey and the countries in North Africa. For this reason, the information must be available in multiple languages, so interpreters are needed. Furthermore, issues of environmental protection, security, gender equality, respecting the rights of persons with disabilities, etc. can be included. These all lead to an arrangement of the ICT at all levels of the government bodies and automate processes and also to improvement in communication between the state and the citizens in the EU Member States. [7]

3. eGovernment in the European Union

In the EU internal market people are able to move freely – either for work or for private purposes – and consequently they have to be able to deal with public services outside their home country more and more. If eGovernment services are to provide significant added value to its citizens and businesses, then it is crucial that different government bodies, both within a country and in the different EU Member States, are able to share information easily and cooperate in serving the citizens.

eGovernment can help to make public services more efficient and easier to access, save time and money, not only to the citizens, but also to the businesses and the governments. The potential cost savings are massive. In Denmark, for example, electronic invoicing saves taxpayers €150 million and businesses €50 million a year. If introduced across the EU, annual savings could exceed €50 billion. In Italy itself, e-procurement systems cut over €3 billion in costs. Effective eGovernment will also improve governance and enable the citizens to become more involved in the activities of their governments. [2]

Across the EU, the governments and their agencies face similar issues and problems in introducing new ICT systems. Moreover, the freedom of the Union's internal market means more and more citizens and businesses need to deal with the public bodies outside their home countries. Whether they seek planning permission to build a new factory or a licence to get married, individuals and firms must be treated fairly and seamlessly wherever they are in the EU. That means that eGovernment tools should be capable of dealing with data from any Member State. This also requires governments to co-operate more.

By connecting the government departments, the companies and the citizens, eGovernment public services also become faster and more personalized, allowing the citizens and the companies to get on with their lives and build their businesses rather than waiting in line in the government buildings. eGovernment can also strengthen democracy by improving two-way communication between the citizens and their government.

While there is much research still to be done, this is not just a technical issue - technology must be combined with organisational change and new skills to fulfil the eGovernment promise. Moreover, the national eGovernment solutions must not lead to new barriers within the Single Market – if the national electronic identities are not interoperable, for example, both companies and people will face new barriers to work and life in the other countries.

Modernising Europe's public administrations therefore means to help the researchers, the companies and the public administrations to work together across Europe and develop the technologies, exchange best practices and forge a coordinated approach. The research is vital for the development of eGovernment throughout Europe, but only if the industry, the smaller companies and the academia and public administrations work closely together to make the government services more efficient and user-friendly. [2]

eGovernment at the EU level means a direct interaction between the citizens or the businesses from one Member State and the government bodies of another Member State, or the European institutions. It also means the exchange of data between the Member States for dealing with cases of the citizens or the businesses, which may raise requests (get information from the other Member States) on the government bodies of their own country (not only within the EU) and the exchange of data between the various EU institutions and the businesses or the citizens of the EU institutions and also between the businesses or the citizens of one or more Member States' government bodies.

4. eGovernment and electronic services

The electronic service is such electronic activity that satisfies a collective need which might be made from the public resources. The essence of the electronic service is remote access and the use of remote electronic connection to obtain available services. The electronic service should provide benefits to both sides, for the services' user and also for the service provider. The electronic services from the perspective of eGovernment are advantageous for both, the state and for service users who may be legal person or natural person. An important role is also played by a proactive approach provided by the public authorities. This is a situation where the public authorities provide most of the administrative activities for the citizens, without their direct participation. [6]

Computerization and electronization of selected services for the public institutions involves [6]:

- manpower reduction,
- reduction of physical space (both office and archives and storage facilities)
- costs reduction from the long term view,
- acceleration and simplification in the process of providing services,
- limited contacts with the users of the services,
- security and compliance procedures,
- higher satisfaction of service users,
- error reduction in provided data.

From the standpoint of legal or natural persons it involves [6]:

- provision of services outside the office hours of the institutions (it saves time),
- improvement in the quality of selected services (clear and correct data),
- remote access,
- online monitoring of the service transaction.

eGovernment services are based primarily on the network of interconnected registries and the public administration information systems. It is therefore necessary to provide such online services that will appeal to the citizens and the businesses. Consequently the Directorate General for Information Society and Media of European Commission has compiled a list of basic public services provided electronically to the citizens and the businesses as part of its activities to measure the progress in implementation and the level of eGovernment services across the EU. [1]

The measurements according to this list have been carried out since 2001 and the Czech Republic has been included in the measurements since 2004. The last report was published in November 2009 and there are all 27 Member States of the EU and also Croatia, Iceland, Norway and Switzerland compared, in the context of the objectives in the i2010 Strategy. List of the services for the citizens and the businesses is in Table 1 on the next page.

Each of 20 services is designed as a measure of the level on a scale of 0-5 (5-stage maturity model). The evaluation of the services takes place on two levels, both for the very existence of the measured service, and second, on its maturity. At the lowest level 0 there is no electronic access. The following levels are: information, one-way interaction, two-way interaction, transaction and level 5 named as automation. For example at level 1 there is the mere availability of getting information on the website such as phone numbers etc. At the highest level 5 there are fully automated execution services through the ICT, without officers' physical contact. There is also a possibility of an electronic payment or receiving a printed receipt. Not every service needs to reach level 5, some services are already fully automated at level 4 or some levels could be omitted. [1]

The first EU Member State to achieve full access to all online services for its citizens and businesses was Austria in 2007. Malta, Portugal and the United Kingdom were the others in 2009. [1]

Table 1: Electronic services monitored by the European Commission. Reference: [1]

Classification of the electronic services by the European Commission.	
Electronic services for citizens	Electronic services for businesses
1 Income tax: declaration, notification of assessment.	1 Social contributions for employees.
2 Job search services by the labour offices.	2 Corporate tax: declaration, notification.
3 Social security benefits.	3 Value added tax: declaration, notification.
4 Personal documents: passport and driving licence.	4 Registration of a new company.
5 Car register (new, used, imported cars).	5 Submission of data to statistical offices.
6 Application for building permission.	6 Customs declarations.
7 Declaration to the police (e.g. in case of theft).	7 Environment-related permits (incl. reporting).
8 Public libraries (availability of catalogues, search tools).	8 Public procurement.
9 Certificates (birth and marriage): request and delivery.	
10 Enrolment in higher education/university.	
11 Announcement of moving (new address).	
12 Health related services (interactive advice on the availability of services in different hospitals; appointments for hospitals).	

The European Commission established ePractice portal (available at <http://www.epractice.eu/>) that offers the information relating to eGovernment eInclusion (raising awareness of the citizens and the businesses on projects in the field of the ICT and their active involvement) and eHealth (electronic health) to support the emergence of new electronic services, the exchange of ideas, processes, information, and for comparing individual states (not just within the EU). This portal also helps to develop selected projects and makes information about them available.

5. eEurope and i2010

The first eEurope Action Plan was launched by the European Commission in December 1999 and was approved by the European Council meeting in Lisbon in March 2000. This plan's aim is to create Europe with digital literacy and to promote an entrepreneurial culture opened to modern ICT and also to ensure that the information will be available for all population groups.

In June 2001 the eEurope+ Action Plan was launched, which should accelerate the reform and modernization of the economy of the future Member States to increase their global competitiveness and promote social cohesion. For candidate countries,

which was the Czech Republic at that time, it was primarily meant to increase the availability of the internet and other public services for most users. In June 2000 the European Council presented and put into operation the action plan eEurope 2002. This plan assessed the previous eEurope strategies and set the additional targets for promoting the internet use, especially for students and research staff, and increased investment in people and knowledge (knowledge economy).

In June 2002 the European Council meeting in Seville launched eEurope 2005 Action Plan, which followed the eEurope 2002. This Action Plan is basically focused on developing the availability of broadband Internet access at prices that are optimal in terms of competitiveness, further network security and better use of the ICT in the public administration.

Following the eEurope action plans i2010 Strategy was published in June 2005. It is the European Information Society for growth and employment. It promoted the positive contribution that the ICT can make to the economy, society and personal quality of life. It was based on three main priorities, also known as three 'Is': Innovation, Investment and Integration into daily life. Concrete action plan for the i2010 Strategy was i2010 eGovernment Action Plan. By 2010, these priorities have been established [4]:

- 'no citizen left behind' – ensure that all citizens have easy access to eGovernment services,
- make efficiency and effectiveness a reality - to ensure that eGovernment services have been in practice an effective, transparent, legally binding and to eliminate the administrative burden for the citizens and the business entities,
- implement high-impact key services for the citizens and the businesses – 100% of the government contracts offer availability in the electronic form, the actual rate of use of at least 50%,
- instant access - enables the citizens and the businesses to use convenient, secure and authenticated access to public services across Europe,
- strengthen participation and democratic decision making in Europe – implementing tools to enable effective public consultation and participation in decision making.

i2010 expired at the end of 2009. On the basis of defined objectives, the number of people who use the internet regularly grew from 43% in 2005 to 56% in 2008, most of which is attached at almost daily basis and using high-speed access. The EU also made the progress in the use of 20 basic online public electronic services for the citizens and the businesses. The range of the services available to the citizens increased to 61% in 2009 (50% in 2007) and the services for the businesses to 83% (70% in 2007). More than a third of the citizens and nearly 70% of the EU businesses used the electronic services of eGovernment at the end of 2009. [1]

The latest strategy in this area should follow the i2010 and it should also determine priorities for the development of eGovernment and the ICT in the period of 2010-2015. This is called the Granada Strategy. The challenge of this strategy is to define strategic steps of the development of the information society in Europe with regard to the so-

called Digital Agenda and the EU Strategy 2020. The Granada Strategy is based on the following topics: infrastructure, advanced use of internet, security and trust, digital rights for users, single digital market, the electronic services, enhancing the competitiveness of the ICT sector in Europe, the international dimension of the Digital Agenda and measuring progress in the ICT. [3]

6. The beginnings of eGovernment in the EU

The beginnings of eGovernment in the EU can be traced back to the beginning of the 90s of the 20th century, when it was possible to communicate with some public authorities via e-mail. Among the first states to allow this to their citizens were Belgium, the Netherlands and the United Kingdom. As the importance of the ICT and the availability of the internet grew, the EU institutions began to solve the issues of the information society and the possibilities of electronization of the public administration.

The first document, which highlighted the importance of the ICT and addressed the possibilities of development of the electronic public services towards the citizens and the businesses, was the White Paper, since 1993 it has been entitled Growth, Competitiveness and Employment: The Challenges and Ways Forward into the 21st Century. The White Papers are generally documents issued by the European Commission that include proposals for action in certain areas. The White Papers are only recommendatory and are non-binding documents for the EU Member States. In 1995 the program: Interchange of Data between Administrations (IDA) was launched. It defined the format of data exchanged in the public administration, architecture and the requirements for the interconnection public administration information systems and ended at the end of 2004. Followed by the eEurope and i2010 Strategy, which was funded by programs: Interoperable Delivery of European eGovernment Services to public Administrations, Businesses and Citizens (IDABC), which ended in late 2009 and Interoperability Solutions for European Public Administrations (ISA). The aim of these programs is to promote cooperation and facilitate communication between the public administration bodies of the EU Member States with using the electronic tools. [7]

The development of eGovernment is bound in all countries to various official documents - strategies, action plans, frameworks, initiatives, programs, etc., which in most cases only replicate or complement the strategy published by the European Commission. These documents are usually scheduled at 3, 5 or 10 years and are issued both at national and at local levels, which depends on the system of the public administration in each Member State. At the same time, many projects and electronic services in eGovernment are realized only at the local level (often only within a specific city or area) that is particularly evident in countries like the United Kingdom or Germany. [7]

7. Current level of electronic services in the EU countries

In response to these official documents, each Member State has developed its own documents and programs over the years with regard to their capabilities and priorities. Contents of most documents in the first phase concerned primarily to increased

availability of broadband internet in the population especially with regard to selected groups - mainly research staff and students. At the turn of the century the development was followed by programs – the internet in schools or the internet for seniors. Since the late 90s of the 20th century creating information portals has played a major role, which includes information about the importance of the ICT in everyday life and the first projects related to the electronization of the public administration. These programs were mainly needed for the creation of the public administration information systems, registries and databases, but also for the electronic data exchange between the public authorities. This phase took place in most of the Member States at the turn of the millennium. [7]

Following phase was a creation of the portals (especially between years 2001-2005), which allow the use of electronic services after the registration. This was used only by the businesses at the beginning - services related to tax collection and transmission of documents related to the company's activities. Then after a few years it was followed by services for the citizens. For the businesses and other taxpayers a separate portal was usually set up, for example, in Ireland it was portal Revenue - Irish Tax & Customs was launched in May 2005, which allows the citizens and the businesses to conduct all operations relating to the payment of taxes and administration online. Since June 2006 it has been possible to register a new company electronically in Belgium (applicants must have an account with a share capital).

Most countries also pay increased attention to a transparent public procurement. In December 2001, for example, portal E-Tenders was launched in Ireland where interested persons can find a list of all contracts they can respond to or insert their own offer. In September 2003 Electronic Marketplace was put into operation in Italy, in which the businesses from across the EU can offer their services and respond to the public procurement. In Cyprus it was e-Procurement System portal launched at the end of October 2007, which in addition to the procurement, the processing and the management of procurement also supports the electronic auctions.

Around the year 2004 there was a trend to unify the system which was divided into several specializations. The reason for this was not only the EU enlargement, but also the problem when individual states began to use different specifications in it. The first specialization is electronic identity represented by so-called eID (identity document) cards, which are used for identifying the holder, for facilitating communication with the public authorities and also to provide secure access to the electronic services available through the internet. Austria was among the first countries that started to issue these cards in February 2003. There are the citizen cards used for authentication (user authentication by password or fingerprint), and whose owner can use this card to enter into applications at <http://www.myhelp.gv.at/> (launched in January 2009) where Austrian citizens can gain access to data which are kept in registries, or they may send the form to the selected public authorities. During 2004 the eID card was also fully implemented in Belgium, where the card can be used for identification and as a travel document too. [7]

Next specification is an electronic passport (ePas) that contains biometric information that can be used to authenticate the identity of travelers. European passports must have digital imaging and fingerprint scan (specific biometrics). These

are placed on the contactless chip. This combination of the biometrics aims to create an unrivalled level of security and protection against fraudulent identification papers. These passports have been compulsory in the EU Member States since July 2009.

Another form of electronization of the public administration is called eDemocracy, which includes eVoting and other forms of involvement of the citizens in decision making process.. eVoting was tested in Belgium in the late 90s of the 20th century and since 2003 most elections have taken place electronically. In May 2002 the electronic voting was tested in Ireland. In October 2005 Estonia also allowed their citizens to vote via the internet in the local elections (eID card have to be inserted into the reader connected to a computer and then after logging on the citizens could vote at a designated website). [7]

Other project in eGovernment domain is a program of e-Borders, which allows sharing data between the immigration services, the police and the customs authorities in the United Kingdom since April 2006. The National Health Service portal was launched in the United Kingdom in November 2008. It offers comprehensive information on this area and after registration the interested persons can use some services, for example: to find personal health information online or to make an appointment with a doctor. In May 2004 the Austrian government launched an electronic service delivery, which has recently allowed its citizens and businesses to communicate with the public authorities (similar to the Czech data boxes). These messages have the legal status as official documents. In December 2007 Bulgaria launched an anti-corruption portal, which provides the rights to their citizens to report corruption quickly and in an anonymous way.

Table 2: Member States in 2009 - 12 for public services controlled by the European Commission, expressed in % based on the fulfillment of 5-stage maturity model. Reference:[1]

State name	Electronic services for citizens (as marked in Table 1)											
	1	2	3	4	5	6	7	8	9	10	11	12
<i>Austria</i>	100	100	100	100	-	100	100	80	100	100	100	-
<i>Belgium</i>	100	100	93	90	100	74	100	68	100	53	57	80
<i>Bulgaria</i>	100	100	100	30	25	50	30	20	50	55	25	50
<i>Cyprus</i>	100	100	51	40	100	50	30	80	50	58	25	25
<i>Czech Republic</i>	80	100	78	30	50	90	100	100	30	88	25	20
<i>Denmark</i>	100	100	95	41	50	80	100	100	100	100	100	100
<i>Estonia</i>	100	100	78	80	100	58	100	100	100	100	100	100
<i>Finland</i>	100	100	100	70	100	50	100	100	-	100	100	-
<i>France</i>	100	100	95	70	100	75	100	100	100	76	100	50
<i>Germany</i>	100	100	100	80	100	57	100	100	37	100	42	-
<i>Greece</i>	100	100	42	40	100	20	30	60	100	50	50	51
<i>Hungary</i>	80	100	41	100	75	25	50	80	75	100	75	0
<i>Ireland</i>	100	100	72	100	100	85	100	95	75	100	-	-
<i>Italy</i>	100	100	85	80	100	75	100	80	52	75	28	35
<i>Latvia</i>	80	100	62	80	75	30	100	80	100	27	100	25
<i>Lithuania</i>	100	100	72	60	50	100	65	80	37	74	100	40
<i>Luxembourg</i>	80	80	80	50	100	50	100	100	76	100	25	-
<i>Malta</i>	100	100	100	100	100	100	100	100	100	100	100	100
<i>Netherlands</i>	100	100	100	75	100	52	100	100	73	100	76	-
<i>Poland</i>	100	100	65	45	55	65	20	80	50	-	50	75
<i>Portugal</i>	100	100	88	100	100	100	100	100	100	100	100	100
<i>Romania</i>	80	100	55	45	100	24	30	20	0	28	25	50
<i>Slovakia</i>	100	100	65	100	50	40	30	80	25	60	50	26
<i>Slovenia</i>	100	100	91	100	100	100	100	100	100	100	100	100
<i>Spain</i>	100	100	95	60	100	35	100	100	100	83	100	52
<i>Sweden</i>	100	100	100	100	100	100	100	98	100	100	100	100
<i>United Kingdom</i>	80	100	90	80	100	100	100	100	75	100	-	100

In tables 2 and 3 there are shown all the electronic services divided by the Member States of the EU in 2009. Leaders in the electronic services for the citizens are Austria, Malta, Slovenia and Sweden, for the businesses Austria, Denmark, Malta and Portugal. The electronic services are not monitored in some states, because they do not satisfy the conditions for these services defined by the European Commission. However, these services exist with regard to the public administration system in the country.

Table 3: Member States in 2009 - 8 business services monitored by the European Commission, expressed in % based on the fulfillment of 5-stage maturity model. Reference:[1]

State name	Electronic services for businesses (as marked in Table 1)							
	1	2	3	4	5	6	7	8
<i>Austria</i>	100	100	100	100	100	100	100	100
<i>Belgium</i>	100	100	100	100	100	100	65	100
<i>Bulgaria</i>	100	75	100	50	80	100	60	100
<i>Cyprus</i>	100	100	100	75	80	100	40	100
<i>Czech Republic</i>	100	100	100	100	80	100	80	100
<i>Denmark</i>	-	100	100	100	100	100	100	100
<i>Estonia</i>	100	100	100	100	80	100	100	100
<i>Finland</i>	100	100	100	75	100	100	100	100
<i>France</i>	100	100	100	100	100	100	40	100
<i>Germany</i>	100	100	100	75	100	100	100	100
<i>Greece</i>	100	100	100	50	80	100	40	50
<i>Hungary</i>	75	100	100	100	100	100	60	100
<i>Ireland</i>	100	100	100	75	100	100	80	100
<i>Italy</i>	100	100	100	100	80	100	12	100
<i>Latvia</i>	100	100	100	75	80	100	80	100
<i>Lithuania</i>	100	100	100	50	80	100	20	100
<i>Luxembourg</i>	100	75	100	100	100	100	80	100
<i>Malta</i>	100	100	100	100	100	100	100	100
<i>Netherlands</i>	100	100	100	50	100	100	37	100
<i>Poland</i>	100	100	100	100	80	100	20	100
<i>Portugal</i>	100	100	100	100	100	100	100	100

Romania	100	100	100	50	100	100	20	50
Slovakia	100	100	100	100	80	100	20	100
Slovenia	100	100	100	100	100	100	100	50
Spain	100	100	100	100	100	100	48	100
Sweden	100	100	100	100	100	100	80	100
United Kingdom	100	100	100	100	80	100	80	100

8. Conclusion

eGovernment is one of the main engines of growth in the information society and the use of modern ICT. The aim is to allow broader cooperation and information exchange between the Member States, so that there is a reduction of administrative costs, time save and faster processing of the public administration services. eGovernment is thus now becoming one of the most important tools for the acceleration, improvement, simplification in improving the transparency and accessibility of the public administration to the citizens. The citizens and the businesses need especially easy access to the information, convenient services, quick response to their requests, fast delivery of the services and of course data security and confidentiality. The public authorities have to become more proactive, increase their internal efficiency and service levels. They should provide greater transparency, reduce the operating expenses and develop new sources of growth.

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