Introduction

E-government and e-governance are the strategic aims of public governance modernization clearly reflected in today's public administration reforms in Europe. In the dynamic and customer-oriented culture, the traditional public services do not meet the consumers’ demands; the government institutions are bureaucratic and therefore often inefficient. The benefits of technological innovations allow overcoming the inefficiency, to achieve optimal governance results, providing new opportunities for NGO, businesses and public institutions interaction, governance transparency, clearer decision-making. Not accidentally, in recent decades researches are focused on conceptualization of e-government and e-governance concepts, on studying various aspects of e-government and e-governance (transparency, openness, accountability, and the ability to interact with participants, etc.). Recently, more attention is being paid to analyzing the concept of e-governance, putting less emphasis on the traditional concept of e-government, or sometimes merging the boundaries between e-government and e-governance. This is determined by increased government attention to the expression of democratic processes, external relations of governance, and new forms of organization.

European countries, in order to modernize the public administration, quite intensively develop the initiatives of e-government and e-governance. E-government’s initiatives are focused on electronic public services and e-governance’s - on the implementation of Good Governance principles, on the development of democratic dialogue between the government and the public, private and non-governmental organizations. Today, more than 70 percent of the public services are available electronically to the society and enterprises, and organizations in the EU. Unfortunately, access to services is much higher than the usage rate. On another hand, the data of investigations of the last decade show that the number of electronic public services has risen faster than the citizens’ activeness of participation in the processes of e-governance.

The aim of the article is to present the most significant results of the scientific literacy and official statistics analysis, with the aim to disclose the concepts e-government and e-governance as well as to present initiatives of e-government and e-governance in Europe.

Defining E-Government and E-Governance

Information Communication Technologies (ICT) in nowadays is of great importance in all facets of Public administration. E-government and e-governance has become an integral part of public administration reforms as in Europe, as around the world. In this case there are many scientific studies conducted by many researchers on conceptualization definitions e-government and e-governance (P. Norris, 2003; G. D. Garson, 2006; T. Lane, A. Pabriks, A.Purs, D. J.Smith, 2002; A. Macintosh, 2008; M. Yildiz, 2007; C.A. W, Rhodes, 1997; B. Dearstyne, 2001; S. C. Palvia, S. Sharma, 2007; T. Bovaird, 2003; Z. Fang, 2002; P.T. Jaeger, K.M. Thompson, 2003; A. V. Anttiroik, 2007 and ect.). Despite these significant scientific discussions it is evident, that the multiplicity of e-government and e-governance definitions supposes demand for further researches.

E-government emerged as a concept and practice in the 1990s, in documents – in 1993. It was US document National Performance Review by Al Gore under the Clinton administration (M. Yildiz, 2007). Nowadays mostly used E-government conception is defined by the OECD as “the use of
information and communications technologies, and particularly the Internet, to achieve better government” (*The e-Government Imperative*, 2003). This definition focuses attention on why countries are implementing e-government rather than on the ICT tools themselves. The e-government goes beyond the simple exercise of putting information and services online, and can be used as a powerful instrument to transform the structures, process and culture of government and make it more efficient and user-oriented. There are three main domains of e-government:

- Improving government processes
- Connecting citizens
- Orientation to stimulation of economy

Obviously, the idea of spreading the use of ICT in the processes of government has contributed to improving the efficiency of government operations, but eventually it has become clear that e-government is not a panacea. Public sector institutions were continually criticized for ineffective decision-making and poor coordination. Although implementation of e-government helps to create new, more effective governance and administrative processes, e-government does not solve the problems of corruption and inefficiency, does not provide effective and accountable governance. It is clear that e-government cannot be seen as traditional government based on the use of ICT in its activities. Thus, the modern concept of e-government is much wider. The implementation of e-government lasting for several decades has resulted in changes in public sector functions, in relations between the government and the citizens, and in every citizen’s conception of the different role of government in society. T. A. Ho (2002, p.) described e-government as a “paradigm shift ... transformation in the government’s philosophy and organization”, as a leap from e-government to e-governance (D. Petrakaki, 2010).

The concept of e-government has been met more often than the concept of e-governance and is often identified with the concept of e-governance. Despite the popularity of and multiplicity of e-government concept, there is a prevailing concept according to which e-government is perceived as the application of ICT to implement the functions of public government, focused on public electronic services. Traditionally, e-government has long been understood as the use of ICT in order to modernize public administration, paying particular attention to the possibilities of the Internet use in the process of public sector development.

A.V. Anttiroik (2007) describes e-government and e-governance as two completely different concepts. E-governance is a broader term comprising a range of relationships and networks in the government, related to the use and application of ICT. E-government is a more restricted area associated with the development of direct (online) services to citizens, paying greater attention to such government services as e-taxes, e-education or e-health. E-governance is a concept that defines the impact of technology on governance practices, the relationship between the government and the public, NGOs and private sector entities. E-governance covers the entire range of government steps develop and administrate, and to ensure successful implementation of e-government services offered to the public. The original idea of e-government has been attributed to the public's need for access to the government decisions and documents via electronic means, later appeared the need of public electronic services, and finally – a search of opportunities to participate in the decision-making process, to consult with the government institutions.

Recently, more attention is being paid to analyzing the concept of e-governance, putting less emphasis on the traditional concept of e-government, or sometimes merging the boundaries between e-government and e-governance. This is determined by increased government attention to the expression of democratic processes, external relations of governance, and new forms of organization (T. N. Riley, W. Sheridan, 2006).
The essence of the concept of e-governance is adding to the concept of e-government the involvement of public, private sector and non-governmental organizations into the governance. According to UNESCO (2005) "e-governance is the use of information and communication technologies in public administration in order to improve the information and public service, encouraging the citizens’ participation in the decision-making processes and making the government more accountable, transparent and effective" (L. Budd, L. Harris, 2009). UNESCO stated the following objectives of e-governance:

- to improve the internal organizational processes of the government;
- to provide information and services better;
- to increase the government’s transparency in order to prevent corruption;
- to reinforce political reliability and accountability;
- to promote democratic activity through public participation and consultation.

According to M. Margolis and G. Moreno-Riano (2010), e-governance is focused on the democratic processes. In today's system of governance, the essence of democratic e-governance is closely associated with various government participants’ interaction. The government, as a coordinating institution, acts in a democratic system, and the citizens and other participants having democratic rights, express the will and pursue their own interests in a formal system based on democratic principles. It is clear that participants, especially representatives of the public, can do much outside the formal institutions, and this activity also forms a model of democratic governance. For example, the practice shows that the interactive statements, online forums, mobile services can have an impact on society and government interaction. They are not official public statements, however, they represent a certain civic activism.

New information and communication technologies change the governance, strengthen democracy and help to maintain a closer relationship between the public sector institutions and their stakeholders (Macintosh, 2006, 2008). The concept of e-governance can be used as an umbrella concept combining the prospects of e-government and e-democracy.

**Initiatives of e-government and e governance in Europe**

European countries, in order to modernize the public administration, rather intensively develop the initiatives of e-government and e-governance. E-government’s initiatives fostering openness of different countries are focused on electronic public services and e-governance’s - on the development of democratic dialogue between the government and the public, business and non-governmental organizations.

While some countries have high, sometimes unrealistic expectations and aspirations in implementation the initiatives of e-governance related to increasing the government’s efficiency and openness, nevertheless, it is often restricted to a primitive perception that the Internet is an open means that naturally promotes democracy, that’s why the government using ICT effectively is already becoming open, transparent and efficient. Such a one-sided discourse is too primitive, and such countries are obviously doomed to slow progress. Primitive perception of e-government is reflected in the results of many implemented projects. In the last decade big EU financial resources were given for implementation of e-government projects, but many of these projects were either partially implemented or failed. Most commonly the causes of project failure are not technological (i.e. inadequate design or implementation of technological infrastructure), but the most common cause is too little focus on project implementation processes, which lack the development of integration of technological systems and socio-cultural systems, human resources, who work and
who use the new systems, preparation and motivation. The practice shows that unsuccessful projects are those whose results do not meet the expectations and needs of the citizens and local communities, are unacceptable or incomprehensible to the society for their usefulness.

Today, more than 70 percent of the public services are available electronically to the society and enterprises, and organizations in the EU. Unfortunately, access to services is much higher than the usage rate, which is less than 50 percent. National strategies of European countries are pointed to increase the use of public services online. Many countries are exploring new venues and multiple channels for accessing online services, e.g. post offices in the United Kingdom, banks and pharmacies in Italy, digital television in Portugal etc.

Research and practice show that the highest level of e-government’s development is in Scandinavian countries, the Netherlands, the United Kingdom. The progress in implementing e-government projects is monitored in countries which have the best-developed technological infrastructure, ensured access to the Internet. As an example in this field can be named the Netherlands, where in the beginning of the 21st century high-speed Internet access was generally granted to all citizens in the larger part of the country, and this resulted in a high level availability of e-government services.

There is an attempt to evaluate the e-government’s maturity by various indices. One of them is the e-government’s maturity / readiness index (E-Government Readiness Index) which has been counted since 2001 by the United Nations (UN) organization. The review “E-government’s development in the financial and economic decline”, carried out by the UN in 2010, presents the evaluation of the systematic ICT impact on increasing the transparency, efficiency and access to public services and also citizens' participation. The United Nations E-Government Survey 2012 explores the inter-linkages between e-government and sustainable development efforts. While presenting e-government development rankings for 2012 it analyses how governments of the world are employing e-government policies and programmes to support efficiency, effectiveness and inclusiveness as the parameters of sustainable development efforts worldwide. Out of 192 surveyed countries in the world, among those which have the highest level of development of e-government are such countries as Korea, in Europe - the Netherlands, the United Kingdom, Ireland, Denmark. Among the Baltic countries Estonia is the recognized leader, taking the 20th place. The indicators of the e-government development index has led to a world average of 0.4877 as compared to 0.4406 in 2010. This show that countries in general have improved their online service delivery to cater to citizens’ needs.

According to e-participation index, which shows the overall results of powers provided to national portals and residents (e-participation index combines three dimensions: e-information, e-consultation, e-decision making), leaders are Netherlands, Korea and in 2012 in high positions stay Kazakhstan (see Table 1). In Europe there is a great progress in countries e-participation. Despite progress the gains are not spread evenly, with the majority still offering low levels of engagement possibilities (UN survey 2012). The data of UN investigations of the last decade show that the number of electronic public services has risen significantly faster than the citizens’ activeness of participation in the processes of e-governance.
E-government’s maturity and e-participation index

<table>
<thead>
<tr>
<th>Country</th>
<th>E-government’s maturity index (top 20 countries)</th>
<th>E-participation index (top 20 countries)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Index 2012</td>
<td>Index 2010</td>
</tr>
<tr>
<td>Korea</td>
<td>0.9283</td>
<td>0.8785</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.9125</td>
<td>0.8097</td>
</tr>
<tr>
<td>United Kingdom and North Ireland</td>
<td>0.8960</td>
<td>0.8147</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.8889</td>
<td>0.7872</td>
</tr>
<tr>
<td>USA</td>
<td>0.8687</td>
<td>0.8510</td>
</tr>
<tr>
<td>France</td>
<td>0.8635</td>
<td>0.7510</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.8599</td>
<td>0.7474</td>
</tr>
<tr>
<td>Norway</td>
<td>0.8593</td>
<td>0.8020</td>
</tr>
<tr>
<td>Finland</td>
<td>0.8505</td>
<td>0.6967</td>
</tr>
<tr>
<td>Singapore</td>
<td>0.8474</td>
<td>0.7476</td>
</tr>
<tr>
<td>Canada</td>
<td>0.8430</td>
<td>0.8448</td>
</tr>
<tr>
<td>Australia</td>
<td>0.8390</td>
<td>0.7863</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0.8381</td>
<td>0.7311</td>
</tr>
<tr>
<td>Liechtenstein</td>
<td>0.8264</td>
<td>0.6694</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0.8134</td>
<td>0.7136</td>
</tr>
<tr>
<td>Israel</td>
<td>0.8100</td>
<td>0.6552</td>
</tr>
<tr>
<td>Germany</td>
<td>0.8079</td>
<td>0.7309</td>
</tr>
<tr>
<td>Japan</td>
<td>0.8019</td>
<td>0.7152</td>
</tr>
<tr>
<td>Luxemburg</td>
<td>0.8014</td>
<td>0.6672</td>
</tr>
<tr>
<td>Estonia</td>
<td>0.7987</td>
<td>0.6965</td>
</tr>
</tbody>
</table>


The United Kingdom, Estonia and Sweden are often identified as examples of good experience in e-government progress and e-democracy development in Europe. Estonia’s image in the world is associated with the new information technologies. A widely used in the world social network Skype is designed to Estonia. Estonia is expressed as the country of the safest the Internet and one of the countries – leaders of e-democracy. Estonia has attracted huge amounts of money for cyber security and thus persuaded Western European countries to grant the establishment of NATO cyber security center in Estonia. First of all Estonia is characterized by strongly developed e-participation dimension associated with the development of e-voting. It is often stated that e-voting is unsafe, especially in national elections, and in some countries attempts to introduce e-voting were discontinued after negative conclusions of independent experts. Estonia is that country where e-voting started in 2005. In 2005 self-government and in 2007 parliament elections e-voting was estimated as a success. In 2005 self-government elections voted online to 1.9 percent, in 2007 parliamentary elections - 5.4 percent of all electors. The cause of a relatively small percentage of the vote is said to be the deficiency of the ID card reader.

Despite the attractive e-government’s scenario and the invested money achievements across Europe today still seem to be quite modest. We cannot say that there is no progress that new services haven’t been created, but we can maintain that the overall outcome is not sufficient yet.
Conclusions

E-government and e-governance are the strategic aims of public governance modernization clearly reflected in today’s public administration reforms. In the dynamic and customer-oriented culture, the traditional public services do not meet the consumers’ demands; the government institutions are bureaucratic and therefore often inefficient. The benefits of technological innovations allow overcoming the inefficiency, to achieve optimal governance results, providing new opportunities for residents, businesses and public institutions interaction, governance transparency, clearer decision-making. Not accidentally, in recent decades researches are focused on conceptualization of e-government and e-governance concepts, on studying various aspects of e-government and e-governance (transparency, openness, accountability, and the ability to interact with participants, etc.).

The experience of implementation of e-government and e-governance in Europe suggests that the latter processes are fast enough, but despite the attractive e-government’s scenario and the invested money achievements across Europe today still seem to be quite modest. We cannot say that there is no progress, that new services haven’t been created, but we can maintain that the overall outcome is not sufficient yet. The development of e-initiatives in different countries is dependent not only on the level of the access to created information resources or developed technological infrastructure, but also on the countries' political ideologies and active socio-economic system. Future research should show what indicators of e-initiatives determine the progress in government actions and results.

References