REFORMING THE PUBLIC ADMINISTRATION THROUGH E-GOVERNMENT: A REGIONAL APPROACH

REFORMA ADMINISTRAŢIEI PUBLICE PRIN E-GUVERNARE: O ABORDARE REGIONALĂ

Monica Daniela TESU (PĂSCULESCU)

PhD Candidate, Bucharest City Hall Sector 2
E-mail: moniedi2003@yahoo.com

Abstract

The aim of this study is to disclose the progress in reforming the public administration through e-government from a regional point of view. The study has revealed that European regions have good performances in e-government development. However, Romania has visible delays in many areas when compared with developed countries. These delays may be compensated with good strategic frameworks and real state reforms. By developing efficient e-government services it is possible to increase the transparency of various systems of the public administration in Romania.

Keywords: e-government, state reform, public administration, European regions.

JEL CODES: H 70, L86, L88, R50

Rezumat

Obiectivul acestui studiu este acela de a reliefa progresele în ceea ce priveşte reforma administraţiei publice prin intermediul serviciilor de e-guvernare abordate dintr-o perspectivă regională. Studiul a relevat faptul că regiunile europene au înregistrat bune performanţe în dezvoltarea e-guvernării. Cu toate acestea, comparativ cu ţările dezvoltate, România se confruntă cu întârzieri vizibile în multe domenii. Aceste rămâneri în urmă pot fi compensate dacă se concep strategii bine fundamentate şi dacă se pun în practică reforme reale ale statului. Prin dezvoltarea unor servicii de e-guvernare eficiente este posibilă creşterea transparenţei diverselor sisteme ale administraţiei publice din România.

Cuvinte cheie: e-guvernare, reformă a statului, administraţie publică, regiuni europene.

FAMP

1. INTRODUCTION

This study investigates the progress in reforming the public administration through e-government from a regional point of view. The local communities in Romania and in the other European countries are called upon now to ensure modern local public services which meet the needs of permanent and temporary residents, whose character has proved, over time, to be unlimited.

Firstly, the study reveals the concept of e-government, and secondly discloses the e-government development in European regions, taking into account the United Nations e-government development index. The study has revealed that European regions have good performances in e-government development. However, Romania has visible delays in many areas when compared with developed countries, and the e-government can play an important role in Romania's development. Therefore, thirdly, the study exposes the current situation in Romania and the main arguments for reforming the Romanian public administration through the development of e-government.

2. BACKGROUND

Some time ago e-government was a bold experiment, but now it is seen as an important tool for public sector transformation. The reason for this may be found in the fact that e-government has progressed to the point where it is now a force for effective governance and citizen participation, both at national and local levels (United Nations, 2010). Generally speaking, e-government refers to the intensive use of information and communication technologies in providing the citizens an improved access to information related to public administrations as well as in providing them outstanding service quality (Spremic and Brzica, 2008: 260).

The e-government services are key tools for improving urban management and a higher level of e-Government services development is needed in order to transform the interactions between public administration and their clients who may be both citizens and businesses (Plumb and Zamfir, 2009: 175). The types of electronic services vary greatly in public sector. It is natural to expect that services are integrated into processes and information systems of the organization that provides them. However, in public sector organizations it is common that departments and units provide services to citizens rather independently. Departments have different processes and information systems which are not connected. In many cases information is stored in separate databases. This may be enough when services are oriented to information delivery between the public administration and the citizens. For

example, providing downloadable documents and forms is simply offering documents in electronic format and making them accessible through the internet (Sirkemaa, 2010: 768-769).

E-government has a number of corresponding points with legal acquis, including privacy, access rights to specific confidential content, public access to public government information and information security. The solution of such public government can be seen as an effort to improve management and effectiveness of public services using technological resources (Spremic and Brzica, 2008: 260-261). Web technologies can enhance dialogue between citizens and the government and help public mangers to better monitor the overall status of city management (Lim, 2010: 20).

Through e-government the local public administration may raise the level of trust between citizens and community on one hand, and institutions and decision makers, on the other hand. This is because there is a tight link between public administration's institutions and the competitivity of a certain teritory, whether we are referring to a city, a region or the whole of a country. In a general context grinded by social and political instability, the citizen's trust for the decision makers and for the public administration in general, is falling. Furthermore, this lack of trust can have direct consequences for any city or region of a country. At the same time, foreign investors are influenced by the favorable conditions that the government offers to the business world, as well as by the negative social turbulence on the potential employees – the active workforce from the respective city. It is an uncontested fact that both competitivity and economic growth are directly influenced by the institutional quality (Popescu and Corbos, 2011: 35).

Local governments can improve not only decision intelligence to locate and tackle social problems, but also democratic responsiveness by designing public services customized to citizens' needs and demands (Lim, 2010: 29). For instance, as Popescu (2009: 186) found, at first sight, Bucharest seems to be a city that needs to be "healed", the local authorities concentrating momentarily on ameliorating the urban situation and on finding more or less feasible solutions for solving especially the infrastructure problems. However, the municipality's website was placed on the 129th place out of 130 at the category European eCity Award, judging by the website's utility for citizens, business and tourists, by design and innovation (Popescu, 2009: 186).

E-government can apply some elements of e-business concept very well. The reasons why public government should overtake ideas and concepts of e-business are connected to the advantages of such a way of making business: the delivery of better and faster services with decreased costs. However, e-government creation is not a process that can be achieved within one simple step or phase (Spremic and Brzica, 2008: 262).

As the phenomenon of globalization is intensifying, the cities are entering into a harsh competition, to gain attention, influence, sale markets, investments, businesses, visitors, residents, talents, and nonetheless, important events; obviously, the competition is not represented anymore by neighbour areas, but by regions and countries from anywhere (Popescu and Corbos, 2010: 268).

3. E-GOVERNMENT DEVELOPMENT IN EUROPEAN REGIONS

The United Nations E-Government Survey 2010 found that citizens are benefiting from more advanced e-service delivery, better access to information, more efficient government management and improved interactions with governments, mainly due to increasing use of information and communications technologies by the public sector. Most countries have published a tremendous amount of information online, many going beyond basic websites to provide national portals that serve as a major starting point for users to connect to government services in different ministries. At the same time, many developing countries need to devote additional energy to transactional services as well as the electronic means of engaging citizens in public consultation and decision-making (United Nations, 2010: 59).

The findings presented above are based on the analysis of the **United Nations e-government development index (EGDI)**. The EGDI is "a comprehensive scoring of the willingness and capacity of national administrations to use online and mobile technology in the execution of government functions". It is based on a comprehensive survey of the online presence of all 192 Member States of the United Nations. The results are tabulated and combined with a set of indicators embodying a country's capacity to participate in the information society, without which e-government development efforts are of limited immediate utility (United Nations, 2010: 109).

Mathematically, *the EDGI is a weighted average of three normalized scores on the most important dimensions of e-government*, namely: *(1) scope and quality of online services, (2) telecommunication connectivity, and (3) human capacity*. Each of these sets of indexes is itself a composite measure that can be extracted and analysed independently (United Nations, 2010: 109):

$$EGDI = 0.34 \times OSI + 0.33 \times TI + 0.33 \times HCI ,$$

Where:

OSI - online service index;

TI - telecommunication index;

HCI - human capital index.

The online service index has four components corresponding to the four stages of e-government development: (1) emerging information services (emerging online presence), (2) enhanced information services (enhanced online presence), (3) transaction services (transactional online presence), and (4) connected approach (connected online presence) (United Nations, 2010: 110).

The telecommunication infrastructure index is a composite of five indicators: (1) number of personal computers per 100 persons, (2) number of Internet users per 100 persons, (3) number of telephone lines per 100 persons, (4) number of mobile cellular subscriptions per 100 persons, and (5) number of fixed broadband subscribers per 100 persons (United Nations, 2010: 113).

The human capital index is a composite of two indicators: (1) adult literacy rate and (2) the combined primary, secondary, and tertiary schools gross enrollment ratio (United Nations, 2010: 113).

The development of e-government in Europe may be analysed by taking into account the sub-regions of Europe (figure 1) in order to have a real image of the process.
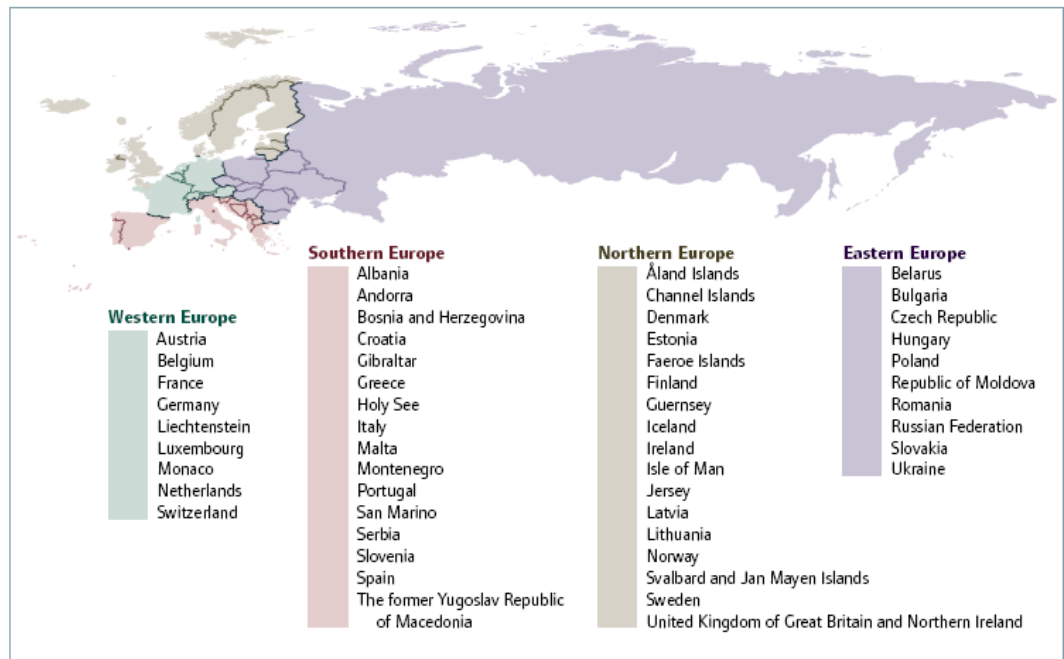
Source: United Nations, 2010: 72
FIGURE 1 - SUB-REGIONS OF EUROPE

All European sub-regions excel in the e-government development index and achieve high scores above world average (figure 2). Because of the advantages of the well-developed telecommunication infrastructure and high human resources capacity, Western and Northern Europe perform very well in e-government development, followed by Southern and Eastern Europe (United Nations, 2010: 71).
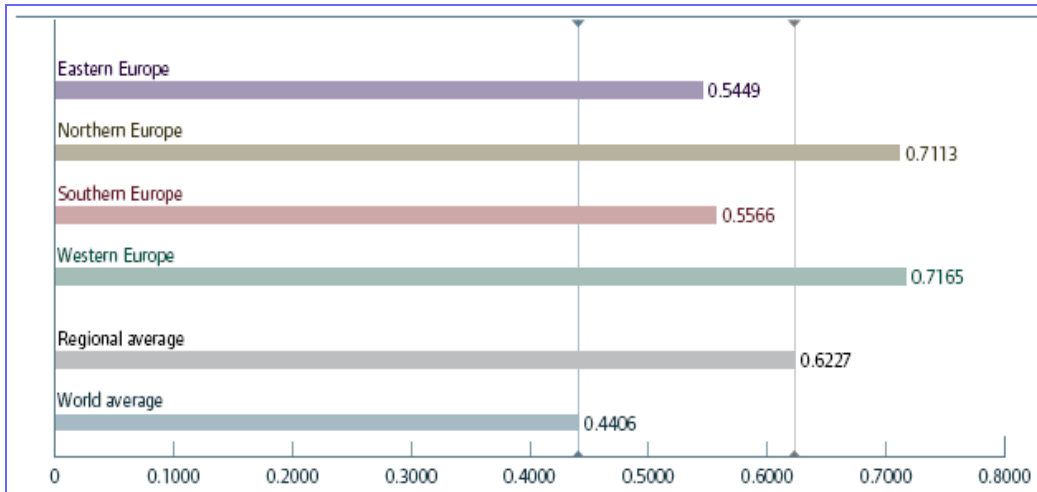
Source: United Nations, 2010: 72

FIGURE 2 - E-GOVERNMENT DEVELOPMENT IN THE SUB-REGIONS OF EUROPE

Many countries in Europe are high income developed countries, and this advantage is reflected in their ranking which is above the world average (United Nations, 2010: 71).

TABLE 1 - E-GOVERNMENT DEVELOPMENT IN EASTERN EUROPE

No.	Country	E-government development index value		World e-government development ranking	
		2010	**2008**	**2010**	**2008**
1.	Hungary	0.6315	0.6494	27	30
2.	Czech Republic	0.6060	0.6696	33	25
3.	Slovakia	0.5639	0.5889	43	38
4.	Bulgaria	0.5590	0.5719	44	43
5.	Poland	0.5582	0.6134	45	33
6.	Romania	0.5479	0.5383	47	51
7.	Ukraine	0.5181	0.5728	54	41
8.	Russian Federation	0.5136	0.5120	59	60
9.	Belarus	0.4900	0.5213	64	56
10.	Republic of Moldova	0.4611	0.4510	80	93
11.	**SUB-REGIONAL AVERAGE**	**0.5449**	**0.5689**	-	-
12.	**WORLD AVERAGE**	**0.4406**	**0.4514**	-	-

Source: United Nations, 2010: 72

As regards the e-government development in Eastern Europe, the e-government development index value is of 0.5449 for 2010, the lowest value of the all sub-regions of Europe. The e-government development index value and the world e-government development ranking for the countries from Eastern Europe are listed in table 1.

The website of the Ministry of Finance of Ukraine scored the highest among ministries based on its content and citizen engagement, although e-services were limited. The Ministry of Finance of Romania also scored high for the region due to the availability of a number of e-services as well as extensive content (United Nations, 2010: 72).
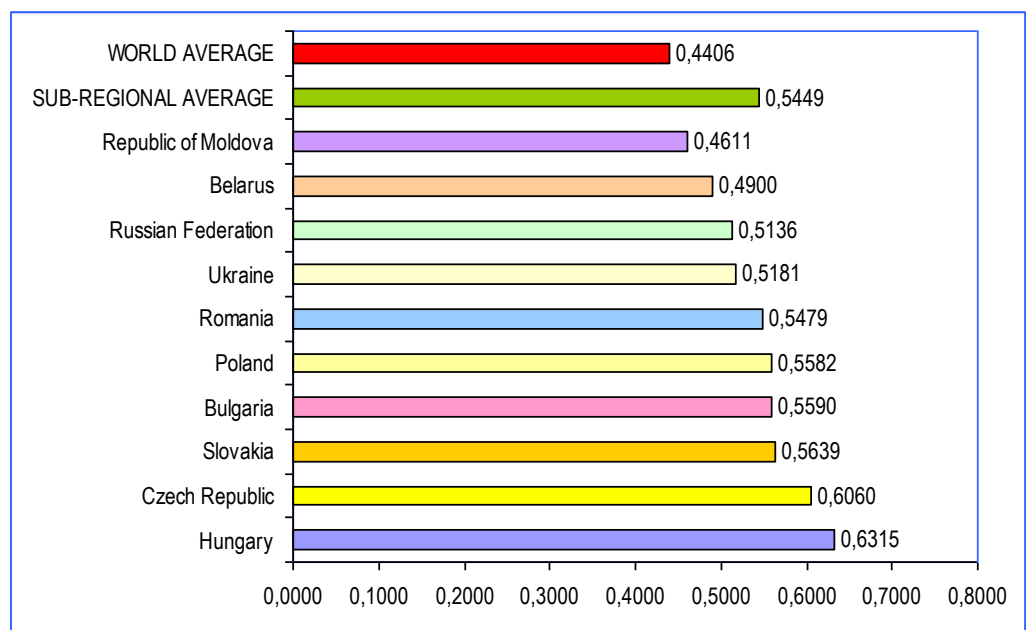

FIGURE 3 - E-GOVERNMENT DEVELOPMENT IN EASTERN EUROPE

In 2010, Hungary, the Czech Republic, Slovakia, Bulgaria, Poland and Romania have registered a value of the e-government development index above the sub-regional average (figure 3) although for most of them (the Czech Republic, Slovakia, Bulgaria and Poland) the ranking is not as good in 2010 as compared to 2008. Only Hungary and Romania have improved their ranking, from 30 to 27 the first one and from 51 to 47 the second one.

4. REFORMING THE ROMANIAN PUBLIC ADMINISTRATION THROUGH THE DEVELOPMENT OF E-GOVERNMENT

As mentioned before, the e-government development index may be calculated as a weighted average of three normalized scores on the most important dimensions of e-government: (1) scope and quality of

online services, (2) telecommunication connectivity, and (3) human capacity. As showed in table 2, Romania ranks 42 from the point of view of the scope and quality of online services, 58 having in mind telecommunication conectivity, and 46 in terms of human capacity.

TABLE 2 - E-GOVERNMENT DEVELOPMENT IN ROMANIA

No.	Dimensions of e-government	Value	Rank
1.	**Online service index**	**0.4159**	42
2.	(1) Points for emerging information services	55	
3.	(2) Points for enhanced information services	38	
4.	(3) Points for transaction services	25	
5.	(4) Points for connected approach	13	
6.	**Telecommunication infrastructure index**	**0.3093**	58
7.	(1) Number of personal computers per 100 persons	19.32	
8.	(2) Number of Internet users per 100 persons	23.99	
9.	(3) Number of telephone lines per 100 persons	23.58	
10.	(4) Number of mobile cellular subscriptions per 100 persons	114.54	
11.	(5) Number of fixed broadband subscribers per 100 persons	11.75	
12.	**Human capital index**	**0.9226**	46
13.	(1) Adult literacy rate (%)	97.60	
14.	(2) The combined primary, secondary, and tertiary schools gross enrollment ratio	81.58	
15.	**E-government development index value**	**0.5479**	**47**

Source: Adapted from United Nations, 2010

Having the data in table 2 regarding the e-government development in Romania, the e-government development index for 2010 was calculated as follows:

$$EGDI_{ROMANIA} = 0.34 \times 0.4159 + 0.33 \times 0.3093 + 0.33 \times 0.9226$$

$$EGDI_{ROMANIA} = 0.1414 + 0.1021 + 0.3044 = 0.5479$$

0,1414; 26%

0,3045; 55%

0,1021; 19%

□ scope and quality of online services
□ telecommunication connectivity
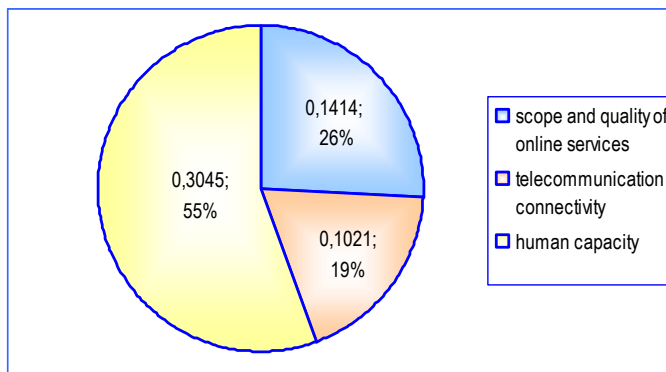□ human capacity

FIGURE 4 - E-GOVERNMENT DEVELOPMENT IN ROMANIA BY COMPONENTS

Figure 4 reveals that the human capacity has the highest proportion in the e-government development index (55%), followed by the scope and quality of online services (26%), and finally by the telecommunication connectivity (19%).

The Romanian electronic system www.e-guvernare.ro (figure 5) was conceived as a unique access point to services and information of the central and local public administration.
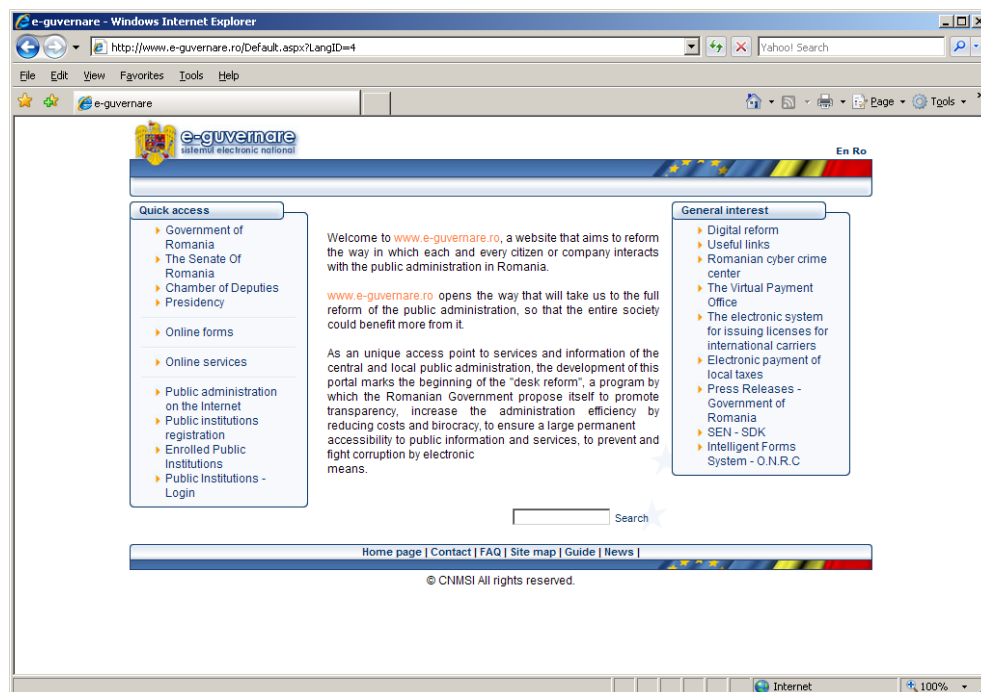
Source: Centrul Naţional de Management al Societăţii Informaţionale, n.d.
FIGURE 5 - ROMANIAN ELECTRONIC SYSTEM

Through the development of this portal the decision makers aim to promote transparency, to increase the administration efficiency by reducing costs and birocracy, to ensure a large permanent accessibility

to public information and services, and to prevent and fight corruption by electronic means (Centrul Naţional de Management al Societăţii Informaţionale, n.d.).

The online services make possible the provision of basic public services through electronic means. This does not imply the elimination of the desk, beeing more like a necessary and important step in reforming the public administration by offering the possibility to choose, by creating an alternative which has not existed so far (Centrul Naţional de Management al Societăţii Informaţionale, n.d.).

The system is available at the moment to more than 650 companies, the most important contributors and large tax payers from the entire country, and requires initial registration.

Through the Unique Form System there are six services online available at present and their number is meant to be progressively extended through Government decisions. The following services are available at present (Centrul Naţional de Management al Societăţii Informaţionale, n.d.):

- Declaration submitted to ANOFM (National Agency for Employment).

- Declaration submitted to CNAS (National House for Health Insurance).

- Declaration regarding the payment obligations towards social insurance budget (National House for Pension and other Insurance Rights).

- Declaration regarding the profit tax (Ministry of Finance).

- Declaration regarding the payment obligations towards the general consolidated budget (Ministry of Finance).

- Deduction regarding VAT (Ministry of Finance).

- Other online services, such as: the electronic system for issuing licenses for international carriers, Public Procurement Electronic System, Visa online, Online customs' declarations, The Virtual Payment Office.

The e-government can play an important role in Romania's development, which is a country that has visible delays in many areas when compared with developed countries. These delays may be compensated with good strategic frameworks and state reforms. By developing efficient e-government services it is possible to increase the transparency of various systems in Romania such as justice, public procurement, health, social protection, etc. One of the few advantages of the current state of affairs is the possibility to build many electronic public services by using already known knowledge, results and experiences of the others. It seems clear that there are many advantages for citizens and

businesses provided by the e-government, but also public sector would benefit from electronic access to services. Therefore, as Sirkemaa (2010: 766) found, it is not surprising that there is pressure and an increasing demand for development of e-services within the public sector.

Faced with pressure to do more with less duet o the economic and financial crisis, governments find themselves in the position of having to be more efficient and agile in delivering public services in order to meet national development objectives (United Nations, 2010: 57). Although there are several important advantages of e-government services, the main advantage is that these services may improve efficiency of the public administration.

However, e-government matters beyond the need to maximize efficiency, or even beyond engaging citizens in urgent questions of public policy. The compelling factor and the bitter lesson learned from the crisis is that trust matters and lack of confidence in government, as in markets, can lead to calamity. Therefore, the capacity to respond under difficult conditions and deliver expected results are cornerstones of effective government and a foundation of public trust (United Nations, 2010: 57).

4. CONCLUSIONS

This study has revealed that all European sub-regions excel in the e-government development index and achieve high scores above world average in 2010. As regards the e-government development in Eastern Europe, the e-government development index has the lowest value of the all sub-regions of Europe. In 2010, Hungary, the Czech Republic, Slovakia, Bulgaria, Poland and Romania have registered a value of the e-government development index above the sub-regional average (figure 3) although for most of them (the Czech Republic, Slovakia, Bulgaria and Poland) the ranking is not as good in 2010 as compared to 2008. Only Hungary and Romania have improved their ranking, from 30 to 27 the first one and from 51 to 47 the second one.

However, Romania has visible delays in many areas when compared with developed countries, and the e-government can play an important role in Romania's development. The e-government can play an important role in Romania's development, which may compensate these delays with good strategic frameworks and state reforms. By developing efficient e-government services it is possible to increase the transparency of various systems in Romania such as justice, public procurement, health, social protection, etc. Nowadays Romania has the opportunity to put into practice the state reform and to build many electronic public services by using already known knowledge, results and experiences of other European countries.

REFERENCES

Centrul Naţional de Management al Societăţii Informaţionale (n.d.). *Sistemul electronic naţional e-guvernare*. Retrieved May 12, 2011, from <http://www.e-guvernare.ro/Default.aspx?LangID=4>.

Lim, J.H. (2010). Empowering Citizens' Voices in the Era of E-Government: Implications from South Korean Cases, *Theoretical and Empirical Researches in Urban Management*, 7(16), pp. 19-31.

Plumb, I. and Zamfir, A. (2009). Improving Urban Management through E-Government Services: the Romanian Experience. *Theoretical and Empirical Researches in Urban Management*, 4(13), pp. 165-176.

Popescu, R.I. (2009). The Branding Potential of Bucharest. Strategy and Success Factors, *Theoretical and Empirical Researches in Urban Management*, 4(13), pp. 177-193.

Popescu, R.I. and Corbos, R.A. (2010). Strategic Options in the Construction of the Bucharest Brand through the Application Analysis of the Measuring Instruments for the Urban Brands, *Annals of the University of Petrosani, Economics,* 10(1), pp. 267-278*.*

Popescu, R.I. and Corbos, R.A. (2011). "The brand of Bucharest – a generator of opportunities or competence needed in the urban competition?", *International Journal of Energy and Environment,* Issue 1, Volume 5, pp. 29-38.

Sirkemaa, S. (2010). Towards Integrated Electronic Services in Public Sector. *Latest Trends on Computers (Volume II)*, Proceedings of the 14th WSEAS International Conference on Computers, Corfu, Greece, July 23-25, pp. 766-770.

Spremic, M. and Brzica, H. (2008). Comparative Analysis of e-Government Implementation Models and Progressive Services, *WSEAS Transactions on Business and Economics*, 5(5), pp. 260-269.

United Nations (2010). *United Nations E-Government Survey 2010. Leveraging E-Government at a Time of Financial and Economic Crisis*, United Nations New York. Retrieved May 12, 2011, from <http://www2.unpan.org/egovkb/documents/2010/E_Gov_2010_Complete.pdf>.

204

PROCEEDINGS OF THE SEVENTH ADMINISTRATION AND PUBLIC MANAGEMENT INTERNATIONAL CONFERENCE "State Reform: Public Administration and Regional Development" Bucharest, June 21-22, 2011