

Exemplary ICT Innovations in Central and Eastern European Countries?

A Step Forward to a Learning Platform.

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Abstract: The last ten years national and international competitions between countries are organized with respect to all kinds of applications in public administration and the public sector. Reasons for governments to participate in those competitions are a modern image, legitimacy and a strong position in policy competition. Not only Western European but also Eastern European countries take part in the competitions. The newly created European Public Sector Award (EPSA) is an example of an international award competition, in the framework of which about sixty projects were submitted by Central and Eastern European (CEE) countries. Sixteen of these were projects related to ICT applications. In this paper these ICT applications are subject of a pilot study. They are shortly described, and the question is raised in how far they are innovative and transferable to other organizations, sectors, or countries, requirements laid down by EPSA.

Analysis of the ICT oriented CEE projects submitted to EPSA shows that almost all are from the bigger or technologically more advanced countries. The majority of projects is not innovative in the sense that they are small, incremental, not predominantly citizen and service oriented, or internationally advanced, and/or developed in cooperation with outside actors.

The suggestion is made to apply the analysis of this paper also on other projects, e.g. in the framework of ICT award competitions, and to build on this basis a “learning platform”. Members of the Working Group on e-Government of the “Network of Institutes and Schools of Public Administration of Central and Eastern Europe” (NISPACEE) could play a role in the development of such a platform for the CEE countries.

Keywords: e-Government, ICT, Award competition, EPSA, NISPACEE, Learning Platform.

1. Introduction.

The last ten years a special kind of competition between public administrations of different countries, or between public organizations or sectors within countries, has been developing. The object of some of those competitions is the advanced state of development and application of Information and Communication Technologies (ICTs) in and by public administrations and public sector organizations. The different applications are distinguished according to the relationship in which they are used: government to

government (G2G), government to business (G2B), government to citizen (G2C), government to employees (G2E), and the other way round: B2G, E2G and C2G.

Among those applications, government websites occupy an important place, albeit certainly not an exclusive one. The main website applications in the framework of e-government relate to 1) providing information and forms (still the most frequently used website application); 2) instant opinion polling with (organizations of) citizens; 3) reciprocal communication between government and citizens or businesses; 4) reciprocal communications or transactions, in which payments are involved; 5) strategic alliances with civil society organizations.

More recently, the amount of “mobile government” applications by deployment of mobile devices as mobile phones and programs such as SMS, PDA, GPS, and the like, is growing rapidly.

A certain growing frustration or disappointment can be established as a reaction on the failing effectiveness of the different e-government applications, just mentioned. Governments and NGOs try to intensify the learning processes with respect to the use of ICT applications in the relations between public administrations and societies.

Nevertheless, frustrating experiences are:

- ICT applications are more directed to information provision than to more sophisticated forms of interactivity, such as communication and transactions;
- ICT applications are more used to automate existing procedures than on the redesign of procedures, on transformation of organizations or on strategic alliances with societal partners;
- ICT applications are focused more on service provision than on democratic participation - even in decisions about what services to provide - ;
- ICT applications are more a support for bureaucrats than for citizens;
- Even the “one stop shops” that are created, are often more traditional front-office counters than integrated front-back office or mid-office arrangements;
- Citizens, still, make less use of the service provisions by websites than was expected.

Partly as a reaction on these disappointing experiences national and international organizations develop programs to stimulate e-government practices in sectors or member countries. Competitions, which country is the most advanced in applying e-government, are examples of such endeavors. Between the members of different international organizations, such as UNO and EU, competitions are organized, which country has the best ICT applications that can be held up as examples for other countries. Diverse reasons can be given, why the interest in these competitions has been growing, and countries participate in them. The following reasons may be mentioned:

1. a policy competition is going on in the globalizing world, in which countries try to attract foreign investors by emphasizing their time-labor-and-effort saving ICT applications;
2. countries try to enhance their international prestige as an advanced and modern country, as well as their national legitimacy, by the deployment of advanced ICTs;

3. cognizance of stimulating examples, realized by others, can help to overcome the frustrations and disappointments, experienced in so many projects;
4. a massive pressure and publicity of producers and suppliers of ICT applications for public administration creates a sense of urgency, that is almost irresistible.

As far as this massive pressure and publicity are concerned, mention can be made of the international benchmark studies of consultancy firms such as Accenture, PricewaterhouseCoopers, CapGemini, etcetera.

Their benchmarks are studied meticulously, and no country wants to stay behind other countries, let alone to be downgraded.

The most famous competitions are: the UN Public Service Awards 2001-3-5-7, the EU e-Government Award, the EU Quality Conferences, and the European Public Sector Award. Apart from these international competitions and benchmark studies, some countries organize their own national competitions. (e.g. Hungarian Public Administration Quality Assurance Award; Czech competition of the Czech Ministry of the Interior “Innovation in Public Administration in 2007” and competition of the Ministry for Regional Development, “The Smart Office of 2007”; The Polish competition about “The most Customer-friendly Office of the Government Administration, 2003)

In this paper the European Public Sector Award is chosen as subject of a pilot study with respect to the innovativeness of ICT applications in CEE countries. The questions raised and tentatively answered in this pilot study are: what is the degree of innovativeness of ICT applications in CEE countries; in how far are these innovations in some CEE countries transferable to other CEE countries; could a learning platform be based on CEE applications as shown in the EPSA competition?

2. *The European Public Sector Award (EPSA) as an example.*

In 2007 the Bertelsmann Stiftung and the University of Speyer, both in Germany, and the European Group of Public Administration (EGPA) in Brussels organized a competition between best practices in European countries: the European Public Sector Award (EPSA). Three areas of “best practices” were selected for the competition:

- a. ***Collaborative Governance***, described in the brochure of the award competition as:

“We are looking for outstanding and innovative examples of partnership working and joined-up services involving public sector organizations and their partners across all sectors. More generally, we are looking for excellent and innovative examples of how public sector organizations and their partners have implemented good governance principles to coordinate their joint activities in a targeted and purposeful manner.”
- b. ***Targeting with Scarce Resources***, described in the brochure of the award competition as:

“We are seeking outstanding examples of how managerial innovations can be introduced and implemented to increase the satisfaction of citizens and communities. The candidates for the award must demonstrate that their innovations are effective and at the same time financially viable, so that they can be implemented cost-effectively and thereby help to improve the administration’s financial position.”

- c. ***Coping with Demographic Change***, described in the brochure of the award.

Competition as:

“On the one hand we are looking for organizations that adapt to the demographic changes taking place within their own workforces. On the other, we are seeking organizations that help to innovate and implement policies which result in public programs better equipped to deal with an older and more mixed population.”

Two Qualities of applications for the award were of overriding importance: the ***innovative aspects*** of the applications, not only in a national but also in a European context, and the ***transferability or instructiveness*** of the applications to other countries, sectors of society, and levels of development.

The EPSA competition, which was held for the first time in 2007, and will be organized every two years, is not only a competition to determine which country, sector or application is, in a certain field of public administration, the most advanced, compared to other European countries. It is – above all – meant as a “learning platform, with made-to-measure contacts and efficient knowledge transfer within Europe”. As the case may be, the European Group of Public Administration (EGPA), as co-organizer of EPSA, can function as learning platform for cooperation between participants of the award competition. (Why should NISPACEE not fulfill a comparable role for the CEE countries?)

Every two years new topical themes for the competition will be announced.

Certainly, an interest in and need for a kind of “benchmarking” amongst EU and CEE countries does exist, (next to the reasons for participation in an award competition, mentioned before). The overall number of EPSA applications (about 325) testifies of this. This large amount of participants in the newly created EPSA competition of 2007 was a pleasant surprise for the organizing parties.

As far as the participation of different parts of the European Union is concerned, about 70 % of the applications came from the existing members of the EU, about 20% from the new EU members, mostly Central and Eastern European members, and about 10% from other European countries.

“Collaborative Governance” scored about 33 % of the applications, “Targeting with Scarce Resources” about 50% of the applications, and “Coping with Demographic Change” about 15%. So, the distribution of the applications was quite unbalanced. Such an unbalance was also noticeable *within* these three broad categories. Almost 1/2 of all the applications were related to developments in the sphere of e-government, business process redesign, and new services and new technologies. Within the category of Targeting with Scarce Resources (even) almost 2/3d of the applications contained developments in the sphere of e-government, business process redesign, and new services or new technologies. However, only 25% of the CEE applications were ICT related. This makes this group of applications especially interesting for a pilot study and analysis of the state of the art of ICT applications in Central and Eastern European countries, field of interest of (the Working Group on e-Government of) NISPACEE.

In this paper the ICT applications, submitted to EPSA, will be (shortly) described. After that, an attempt will be made to answer the questions, whether, or in how far, these

applications can be deemed *innovative* and *transferable* to other EU, and especially CEE countries. For that purpose some relevant criteria of innovativeness and transferability will be developed, and the EPSA applications, submitted by CEE countries, scored according some relevant criteria of innovativeness. This may be helpful for future exchanges of applications by CEE countries or sectors. From the way in which the CEE applicants filled out the guiding forms of the applications, it appears that they are themselves convinced of the relative innovativeness of those applications, and of their exemplarity also for other European countries. This might be a topic for discussion amongst members or member countries of NISPACEE.

At the same time, the EPSA initiative gives an opportunity to draw the attention of wider circles of (CEE) countries on advanced and interesting e-government developments within their own category of countries, while they are confronted with comparable historical administrative legacies, and actual circumstances. In this sense there may be pragmatic reasons as well, to choose the EPSA applications as proxies for the state of the art of ICT within the CEE environment.

3. The ICT oriented EPSA application cases:

For each of the EPSA applications a short summary of the content will be produced that will make it understandable, what kind of ICT application is at stake. The descriptions of the applications will take place as much as possible in the wording of the applicants themselves. At the end of the short description, the answers given on the questions of the EPSA form with respect to innovativeness of the application (“what do you think are the project’s most innovative elements?”) and its transferability (“what parts of the project can be transferred best to other public administration bodies?”) will be reproduced.

1. Tallin City Office: eKool an internet based information system for the education sector, Estonia.

eKool is an information system where pupils, teachers, parents, school management and local government get relevant information, and through which they can communicate. eKool contains a network of 330 schools (67 in Tallin), 3967 teachers, 20733 students, and 23973 parents. It was initiated by the education department of the city of Tallin. “Local government gets operative information about school attendance, and can observe how students complete their school obligations. School management gets an overview about teachers’ work and correctness, pupils’ study results, tests and absences. They answer to teachers, pupils and parents questions in the forum. They compose different reports from the data. Parents can view their own children grade sheet, study book, timetable, class register, attendances, homework and tests. They can participate in the forum to communicate with teachers. Teachers can enter grades, notifications, attendance information and post homework assignments, send public or private messages to class, parents or pupils.”

Apart from this, eKool’s goals are, amongst others: “to get a faster overview about the results of the study process as well as missed classes and anticipate poor grades. To generate the reports required by Tallin local municipality. Data will be used for statistical analysis. To create an education information system where pupils, parents, teachers and

school management can exchange information, communicate and discuss different issues, and to involve parents into the study process.”

Innovativeness: 1. one data entry makes information more accurate and up to date. 2. Data collection from parents and students is simple, because they are able to update the necessary information by themselves. 3. School administrators can benefit from real time reporting tools. 4. Class and students grade-books are accessible to view and also fill virtually from everywhere in real time, 7 days a week and 24 hours a day. 5. Bureaucratic procedures have been simplified by substituting documents on the paper to electronic ones.

Transferability: eKool contains information about absences which is an important information for Social Welfare and Health Care Department.
“eKool is developing to other European countries”

2. Mayor’s Office of Pesteszébet Local Government: Establishing a Document Office meeting international standards, Hungary

Point of departure of the project was: “It is essential to manage the residents’ affairs not only in a lawful and professional way, but in a courteous, prompt and service-friendly manner.” In the ICT sphere the following measures were taken: a client calling system was installed, a “one-stop-administration” for payments was established, a computer terminal with direct access to the portal, as well as an information terminal with direct access to the database of legal rules were placed. The activities of officers are supported by computers and other IT tools.

Innovativeness: client calling system, one stop administration, pleasant waiting time, computer terminal for clients, elevator and toilets for people with handicaps, case handling at home if necessary, communication training, IT tools.

Transferability: -

3. Integrated System for Documents Management, Giurgiu County, Romania

This application contains: “electronic registration of all the papers and documents; monitored circulation of the documents; track records of all the entrances and exits of all kinds of documents: petitions, authorizations, requests, etcetera; electronic archiving.”

Innovativeness: an efficient instrument of the management of documents.

Transferability: -

4. Municipality Office of Piotrków Tribunalski: “The Municipality Office as a Civic Platform of Young People, Poland.

Survey results confirmed the negative stereotype of the Citizen Service Center among the people. The conclusion was to launch a promotion campaign to ensure that the information reaches the widest range of people. The project’s goals were: “to popularize the delivery of public administration services via the internet and e-mail and to handle official businesses via the web, to propagate knowledge about access paths to the public sector information, to increase the use of new technologies in the process of service delivery, to teach young people about modern forms of the office’s work, to intensify educational activity as regards building an information and civic society, to develop good, dialogue-based relations between the local government and the residents of the municipality.”

The methods used are: “written presentations, meetings with teachers, briefing meetings, competition, surveys, prizes and diploma’s, multimedia presentations, a website, application forms, reports, press and radio interviews.”

Some of the results were: “the young people got to know the procedures used in the office; they familiarized themselves with the “official nomenclature.” “Moreover, thanks to the program, 234 students got to know administrative procedures; errors in information cards and applications were eliminated; the website traffic increased by 20% and more people started to use the free internet access.”

Innovativeness: The idea to involve young people in the local community issues through an attractive form of competition and the fact that the self-government administration office goes beyond the sphere of obligations connected with the delivery of public administration services and that it additionally takes on the educational, promotional and also coordinating role with regard to joint actions of educational institutions in the municipality.

Transferability: The information platform developed within the Program, which provides equal access to information, may be used in all projects that combine several organizations. The role of a coordinator should be assumed by an organization with the greatest powers.

5. eSTAT, project of the Statistics Estonia.

“eSTAT is a web-based on-line electronic data collection system from enterprises and public administration (economic entities) obliged to present statistical reports for Statistics Estonia (SE). Before launching eSTAT, the most of economic entities presented their statistical reports to the SE on paper. Electronic forms are downloadable from the website of the SE. Not many economic entities used that possibility.”

A unified data collection process, higher data quality and a shorter time for the data processing are the goals of the eSTAT project, next to a more modern image of the SE.

“In eSTAT a respondent can view a list of all statistical reports its enterprise has to submit to the SE, compile and transmit the reports, check and correct them immediately upon compiling, view the reports the enterprise has submitted earlier via the system, etc.”

“More than 1/3 of possible users of the system have joined with the system. eSTAT is developed further according to users advice.” “In principle, the whole system could be adaptable for any other body, which needs to collect data. The central customer service could be advisable for any public institution.”

Innovativeness: eSTAT is only for authorized users. Authentication of users is based on using personal ID-card and internet-bank code card.

Transferability: In principle, the whole system could be adaptable for any other body, which needs to collect data. The central customer service could be advisable for any public institution.

6. The Data Warehouse of the Vysočina Region, Czechia.

“The Data Warehouse is a significant part of the Vysočina Region’s information system. It provides for the fast accessibility of data from various areas for managers, the Regional Authority staff, and in the future also for the Region’s inhabitants and all regionally established organizations.” The goals of the data warehouse project are: “effective and user-friendly access to all relevant data on the regional level of public administration, for

all entities concerned; accelerating and improving decision-making processes of the public, companies, bureaucrats and managers of public administrative entities.”

With the project has been achieved: “1) central storage of data in a fixed and logical structure; 2) easy internal as well as external access; 3) timesaving in the processing of data, and fast on-line availability of data; 4) regular updates of data at set intervals; 5) increase in the telling value and quality of data; 6) the possibility of joining data from operating systems; 7) elimination of simultaneous manual processing of the data by several employees.”

Innovativeness: The implementation of the project entails a significant change in the handling of information at the Regional Authority, and a change in the thinking of people. The implementation of this innovation is not yet complete.

The speed, quality, and large volume and efficiency of data processing. “On demand” availability at any time and place.

Transferability: The experience we have gained thus far in our construction process can be used in the construction of data warehouses in other regions. In the future, the exchange of the data processed will probably be possible, and thus enable the creation of a “virtual” data warehouse of all the participating regions.

7. Taxation Department in Pila, Poland.

The problem situation of the project was the combination of the introduction of a modern and customer-friendly administration with growing budget restrictions. Internal and external measures were taken to economize on costs of mail, improvement of tax compliance, information and schooling for tax payers, and input of tax declaration data into the computer system by the officials together with the tax payer.

An intra-network has been built which gives access to basic data (about regulations, organizational policies, topical matters, recent developments, trade union news etc.) and supports the cooperation between the employees.

Innovativeness: The high activity of our unit in the region, compared with other organs of public administration, in spite of scarce means. Direct contact with representatives of our authority and handling of business without unnecessary delays contributes to our image of customer friendliness. The local deployment of human resources (high school graduates) through their employment in the structures of state units.

Transferability: All projects are transferable: especially, the improvement of the (legal) insight of clients with respect to the way in which the bureaucracy functions.

8. ZPIZ Slovenije – The Pension and Invalidity Pension Insurance: Project “Pension Insurance & e-Government”.

The project improved processes in the area of pension and disability insurance by infra-structural connection of the ZPIZ enterprise servers with the Government IT Service in order to enable direct access to the Central National Registry: the Birth Registry, Deceased Registry and Matrimonial Registry. This shortens the processes for customers and administration, saves public funds, and improves the reliability of the data through assisting in identification before starting administrative execution.

“The new approach is also much faster, less expensive, and the data obtained are more complete. Information, thus easier accessible, is not only for the benefit of clients (they do not have extra costs for notification of changes) but also for the Institute and finally

the state since in this way the Institute can manage the funds more properly (stopping of payments in time, no overpayments, etc.).” The project is the first G2G project in Slovenia.

Innovativeness: After the definition of the Institute’s needs and technical possibilities we had to find a technical compromise with IT equipment in IT Center of the Government. The data which were collected from the Government’s IT Center then had to flow within the Institute’s network which has a different infrastructure to that of the Government.

Transferability: We think that the concept of connectivity or enabling common databases to other institutions of public administrations is very useful and necessary.

9. Uricani Public Administration, Project “Economy based on Knowledge”, Romania.

The goals of the project are: to ease the educational problems of the different levels of the population, to provide the citizens a good and efficient access to digital information through a local electronic network, to provide good electronic governmental services to the rural communities, and to secure mechanisms that encourage business initiatives in the regions.

The services offered are: access to a computer, access to internet, telephony service, copying facilities and scanner facilities.

Innovativeness: Accessing public services, less time has to be spent waiting for documents from City Hall. The educational process is modernized and evens the position of pupils and teachers.

Transferability: “The perfecting of the pupils and didactic frames in the utilization of ICT. The stimulation of school performance. The access of the pupils to internet and to the communication through internet (messenger, e-mail).

10. Statutory City of Chomutov, Project “Concept Phone Book”, Czechia.

This project provides the client remote access to the municipality, offers self service through e-government and ICT, and reduces bureaucracy.

The virtual telephone book has already “3entries” since March 2007 and we expect to have app. 7 “entries” in total by the end of 2007.”

“We will increase the comfort of our clients even more in the next 2 months by including the administrative fee directly in the price of the client’s SMS.”

Innovativeness: We significantly supported the concept of e-government in the Czech Rep. We provably lower the bureaucracy on local level (Local government). We enabled our clients the non-stop access to the town hall for selected matters.

Transferability: The idea of transferring suitable administrative tasks to a simple form of SMS (or another type of messages. Creating and filling up the virtual telephone list by simple signs for selected administrative tasks. Unbeatable low price for remote servicing of clients and at the same time high added value for them.

11. Taxation Office in Gostyń, Project “System improvement for Tax Declaration”, Poland.

The goal of the project is to reduce the time spent on the registration and verification. In the past, the taxpayers handed their tax declarations over to the official, and received a handwritten receipt. The official checked the declaration, in which often many mistakes

were made. The taxpayer had to visit the tax office. The checks and the visit of the taxpayer took much time.

In the new setting, the taxpayer hands in the tax declaration with annexes. All data are – in the presence of the client – directly inputted in the computer system. Possible formal or calculative mistakes are immediately detected and corrected.

Innovativeness: The taxable person is present when his tax declaration is inputted in the computer system. He participates personally in the verification of the tax declaration. It takes only a few minutes, depending on the kind of declaration and the number of attachments.

Transferability: In view of the elements described above, the whole project is worth to be copied.

12. Ministry of Finance, Department Of Information Technology Services (DITS), Project “Electronic Document Management System” (e-OAS), Cyprus.

“The Office Automation System covers all the requirements of an integrated electronic records management system. It is based on the European standards MoReq and PRO. It supports enterprise-wide document management services and process workflows. It also provides tele-working capability.” The project’s goals are: “The redesign/redevelopment of the existing version of OAS, in order to produce a web-enabled version (e-OAS), with the following fundamental objectives: to enable the electronic exchange of documents between Government departments, set and implement the rules for the Electronic Records Management, improve the quality of services and response time, enable remote tele-working, operate on any hardware/software platform and to comply with European and International Standards, directives and regulations published by the European Union.

Innovativeness: eOAS applies electronic workflows for different document types (incoming, internal, outgoing), as well as workflows to ensure authorization and to enforce document security. Workflows are also applied on Disposal (between organizations and the State Archive). Furthermore eOAS provides tele-working with the proper security, from home or abroad.

Transferability: The eOAS system is completely transferable and can be installed and work in other governmental organizations, without any limitations or/and changes to the application software. That is what makes the existing rollout plan to all Government Organizations easier.

13. Tartu City Government, Project “Transfer to the digital document management system in the Tartu City Council, the City Government and subordinate institutions”, Estonia.

“The project is aimed at improving the efficiency, public accessibility, and overall accountability of governance in Tartu by implementing the digital document management system (DMS) in the Tartu City Council, the City Government and subordinate institutions. The project consisted of preparations involving officials from different levels and branches of participating organizations, choosing and installing reliable and configurable software and training users. The digital DMS has helped save time and money through increased efficiency as well as made governance more accessible through the web-page of Tartu and several e-services. The project achieved its aims and has

become a good basis for developing efficiency, accessibility and accountability even further.”

“The traditional DMS posed as a natural barrier to increasing efficiency, accessibility and accountability of city governance in six major areas: Workflow, Collaboration, Work integration, Public accessibility, Client centered approach, and Security.”

“The (new) system is constantly fine-tuned to maximize the potential for the improved workflow, collaboration and work integration.”

The most innovative element is the fact that one reform enabled to achieve two separate sets of improvements – increased internal efficiency and external accessibility and accountability.”

Innovativeness: The most innovative element is the fact that one reform enabled to achieve two separate sets of improvements – increased internal efficiency and external accessibility and accountability. Instead of building a closed DMS and copying it constantly to databases that are underlying the web-page and e-services, different user-interfaces essentially access the very data-bases in which the information is stored in the first place.

Transferability: As aims and duties of the public sector in general and local authority in particular are fairly similar, the project has a huge value as a source of now-how for other local authorities and public sector institutions. The project can be copied almost as a whole or as separate elements like software, management and the like. We have cooperated with several organizations on both levels.

14. Municipality of Rybnik, Project “The electronic Town Card and public Internet Access points in the City of Rybnik”, Poland.

“The electronic Town Card enables to pay for a number of services around the city, e.g. bus fares, swimming pool entry fees, parking fees in parking meters and other services in selected organizational units within the city.” It contains also an electronic signature certificate.

“Launching of such widespread town services provided via the electronic town card is a pioneering undertaking in the scale of the entire country. The project supports the development of e-administration and e-services which constitute one of the priorities of the information society development. Thanks to the project, the society has the opportunity to see and to use advanced technology, and this experience should facilitate any future implementation of new projects and further development of the information society as well as counteracting the technological exclusion.” ”The real novelty at the scale of the country will be an e-card being the carrier of the electronic signature.”

Innovativeness: Launching of such widespread town services provided via the electronic town card is a pioneering undertaking in the scale of the entire country. The project supports the development of e-administration and e-services which constitute one of the priorities of the information society development. Thanks to the project, the society has the opportunity to see and to use advanced technology, and this experience should facilitate any further implementation of new projects and further development of the information society as well as counteracting the technical exclusion.

Transferability: Both the individual project components and the overall project may be used by other public administration bodies within each commune. The possibility to

implement further stages makes the project more accessible and enables its implementation in small communes with limited funds.

15. Ministry of Public Administration, Project “e-VEM – One stop shop system –“, Slovenia.

“The basic purpose of the e-VEM project is to provide a suitable electronic support for the future entrepreneur and enable him/her to start with business operations in the shortest time possible.”

“The project has faced a few challenges during running: some of them presented huge obstacles for the successful termination of the project: - The biggest technical challenge was the integration of systems and connecting the institutions. The project is very complex; it connects all levels of public administration and 14 institutions; - The integration is difficult due to the specificity of each system. At the same time the project presents delimitation of competence what caused resistance of institutions to cooperation; - For the activation of the institutions top management support was crucial. It was necessary to enable startup. The support of top management was connected to assumption of personal responsibility for failure of the project; - The work of the clerks covers a vast thematic area of registration in business register, tax data, health and disability insurance, pension insurance, general requirements for operation. Over 400 clerks are trained, who provide information at One stop shop enter points. It is demanding to train clerks and to provide constant training to such number of referents.”

“When a civil servant or a citizen fills in data on the portal, the job for the user is finished. The system itself starts to send data to the competent institution.”

Innovativeness: The main advantage for a citizen is that he enters one point and performs all procedures with help of a civil servant or from home if he owes a digital certificate. Consequently he does not need to visit different institutions, but the system itself pushes data toward all competent institutions. The information support provides a unified support regardless of the type of entrance into the system.

The e-VEM project offers information support to all entry points. This way the unification of the procedures is achieved and all information is gathered at one spot.

Transferability: Recognition that the concept of vertical and horizontal co-operation in joint effort of all stakeholders leads to improving services for (future) entrepreneurs and businesses as well to improving the working environment for civil servants.

16. Estonian Health Insurance Fund, Project “Register of the insured persons”, Estonia.

“The data in the register of the insured persons is used by the providers of health care services, public agencies and citizens.”

“In the year 2000 a person himself was mostly responsible for submitting the documents necessary for the establishment of the health insurance cover to the Health Insurance Fund. The documents were submitted on paper and approximately 100 officials were engaged with processing these in the Health Insurance Fund. About 2,5 million records related to health insurance cover were made in a year, the processing of data was slow, the data gathered from different sources was often inaccurate and contradictory.”

“The objectives of the project were:

1. to free a citizen applying for insurance cover from the submission of documents, because the necessary data already exists in different registered databases;
2. to standardize and automate the data interchange related to insurance cover, in order to increase the data processing speed, to improve the data quality and to reduce the expenses related to data processing;
3. to create an electronic possibility for the use of registry services for citizens, the providers of health care services and the ministries, in order to improve the availability speed and quality of service.”

“ For it was the first solution of its kind in the world, international SAP consultants were helping to solve more complicated information technology issues, consulting both the relevant specialists of the Health Insurance Fund as well as AS Microlink, who was the Estonian partner of SAP Österreich GmbH.

Innovativeness: One of the innovative elements is definitively X-tee – the data interchange layer joining the publicly regulated databases, which guarantees the observation of the requirements resulting from the law in case of electronic data interchange. In addition, the technical solution used in the course of the project is the first of its kind among the agencies offering the so-called insurance service in the world, in the realization of which SAP CRM 5.0 platform was used.

Transferability: It is logical that the different databases do not duplicate the information existing in the databases, but use the relevant registries. This guarantees that the data is up-to-date and adequate. The basic logic of this project can be applied in all the agencies, which use state registered databases.

4. Exemplary innovativeness and transferability.

As indicated before, the purpose of this paper is to give an impression of the state of innovativeness and transferability of Information and Communication Technology (ICT) applications in Central and Eastern European (CEE) countries, and especially with the new members of the European Union. Both qualifications are required for the creation of a “learning platform”. Innovativeness and transferability are very complex concepts and difficult to make operational. This pilot study is an attempt to develop relevant criteria. As a proxy criterion for the level of ICT use in the CEE countries, the self selected and self evaluated CEE applications of the EPSA competition 2007 are chosen. The choice of these EPSA scores as proxies for a general innovativeness of countries or sectors may be justified because of the self-selection that took place, and the relative transparency of the ICT sector for the participating actors. Next to innovativeness, transferability to other CEE countries was one of the qualities that the applications of EPSA must have to participate in the competition (see above). From the way in which the applicants filled out the guiding forms of the applications, it appears that they are themselves convinced of the relative innovativeness of those applications and of their exemplarity also for other European countries.

So, the first purpose of this paper is, to determine how the CEE competitors within EPSA perceive the degree of innovativeness and transferability of their applications.

At the same time, the EPSA initiative gives an opportunity to draw the attention of wider circles of the CEE countries on advanced and interesting e-government developments within their own category of countries, while they are confronted with more or less

comparable circumstances. Instructiveness and transferability of the applications, which are being sent in by CEE countries to EPSA, are preconditions for their participation in the competition as well. If the applications satisfy these preconditions, there are also good pragmatic reasons to choose the EPSA applications as a proxy for the state of the art of ICT in CEE countries.

5. Dimensions of Innovativeness¹ and transferability

The Encyclopedia of the Social Sciences (1968) describes innovation as “the process by which new products and techniques are introduced into the economic system. Successful innovation results in the capability of doing something that could not be done before, or at least not so well, or so economically”. Following Schumpeter, innovation was considered as a technical/economic phenomenon. In this line of reasoning, actually, not only products and processes, but also the entry into, or development of new markets, may be considered to be innovations. More recently, the introduction of other kinds of changes may be recognized also as innovations. The concept is extended to more social dimensions, such as the creation of new forms of organization, personnel policies, informatization, financing, auditing, and housing (e.g. office landscapes, flexible offices, telework, etcetera).

The Encyclopedia of the Social Sciences focuses upon objectively measurable innovations at a macro-level: the introduction of changes in the economic or the societal system. At a micro level of individual organizations, managers and entrepreneurs, and individual employees innovations are more psychological phenomena. At that level there are no objective measures to determine, what an innovation is. “Innovations are only in the eye of the beholder.” In the overview of EPSA applications in the foregoing section many innovations are mentioned that have only a localized meaning for the persons and organizations involved in them. This has consequences for the significance of a pretended innovation for the other parties at the learning platform. An innovation, considered as such by the “sending” CEE country or sector is not necessarily an innovation for the CEE country or sector, “receiver” country of the message.

For this reason, this paper limits the question, whether the EPSA applications, presented by CEE countries, are innovative, to the more objective dimensions of innovativeness in the literature. The dimensions, which will be the background of the scoring, are the following:

Content of the innovation

In accordance with the latest developments of the extension of the concept of innovation, this paper is not only focused upon changes of products, processes, services, and markets, but also on changes of the supporting processes, mentioned above. These changes may be initiated by the supplier or the consumer of a service, or both. They are often accompanied by more or less radical changes in the relationship between supplier and customer. Normally, innovations do not occur in one dimension of innovativeness or in one dimension of change. On the contrary, when one part or aspect of an organization is innovated it will have its repercussions in other parts or aspects of the organization. E.g.

¹ This section of the paper relies mainly on a study and analysis executed by InAxis for the Commissie Innovatie Openbaar Bestuur (Innovation Commission on Public Administration) in The Netherlands.

when processes are innovated, human resource management may have to follow to reap the full benefits of that innovation.

The consequences of such innovations may occur at a grand scale or at a small scale; they may affect citizens directly or indirectly.

Intensity of the innovation

An innovation may be radical (revolutionary) or incremental (evolutionary). Radical innovations entail, amongst others, new institutional arrangements; incremental innovations require some minor adaptations in properties, capabilities and competencies, without changes of the essence of the public product, process or service.

Place of initiation of the innovation

The starting of an innovation may take place externally (in cooperation or coordination with stakeholders of any kind) or internally (through within-puts from the service providing organization). Where radical innovations are concerned, initiatives from many sides may be required. Especially when an innovation requires institutional adaptations, or cooperation and coordination of many actors inside and outside the organization, the initiation of an innovation will require also involvement of the top of the organization.

Phases of the innovation process

In principle, an innovation process may start at every step of the business, from research and development to marketing and consumer relations. The more steps are involved in the process of change, the greater the chance that a real innovation is created.

If also other organizations are involved in the process of change, the degree of transfer of the necessary capacities, capabilities and insights to the other organizations has to be taken into consideration in the judgment whether a certain country, sector or organization is really innovative.

Explicitness of the innovative process

The targets of the innovative process may be made explicit in quantitative or in qualitative terms. To check, whether a certain goal is reached, quantitative criteria are more exact than qualitative ones, but as instruments, to establish the degree of innovativeness of an application or organizational change, they cover only part of the innovation spectrum, that is relevant for our research question.

As far as *transferability* is concerned, only some elements of the conceptual framework of the “innovation diffusion” theory² are relevant in the context of this paper. Not all elements of this theory are relevant, because most of its elements lie outside the influence of the EPSA competitors. Most elements of the diffusion theory, such as the different kinds of adopters, of communication channels, and of stages of the diffusion process lied outside the grip of the participants of the EPSA competition. These participants cannot determine what kind of channel (mass communication or personal communication) is available and will be used. Neither can they determine, which kinds of adopters are at the receiving side of the communication (innovators, early adopters, early majority, late majority or laggards), or in which stage of development (awareness, interest, evaluation,

² Rogers, E.M. (1995). Diffusion of Innovations (4th ed.). New York: Free Press

trial or adoption) the diffusion process is. It is, of course, useful to try and take these elements into consideration, when a practical learning process becomes started, but they are outside the decisive influence of the EPSA competitors.

What they can do to further transferability and the factual transfer of the best practices is, to be as transparent as possible with respect to the problems that were encountered, to prevent the seduction of window dressing, to sketch a realistic picture of the costs and benefits, and to share their experiences. By making case studies, the different dimensions of the transfer processes can be put in the right context. This way they may enable the adopters of an innovation that is advocated, to take adequate decisions with respect to the transfer of the innovation.

6. criteria for scoring innovativeness and transferability.

From these considerations the following criteria to determine the innovativeness and transferability of the CEE projects, related to ICT applications, and submitted to the European Public Sector Award (EPSA 2007), were derived:

1. content of innovation: product, Service, market, operational or supporting Process.
2. intensity of innovation: Radical, Incremental.
3. locus of initiative: External (with stakeholders), Internal (from within), or both.
4. orientation of innovation: Administration process, Citizen service orientation
5. scale of introduction of innovation: Large scale, Small scale
6. transferability of innovation: Organization, Sector, National, International.
7. factual transfer: only Internal, only External or both Internal/External.

On the basis of these criteria the scores of Fig. 1. are composed.

	1	2	3	4	5	6	7
1. Est.	Service	Radical	Int/Ext.	Citizen	Large	S/N/Int.	Int/Ext
2. Hung.	Process	Incram.	Internal	Citizen	Small	-	-
3. Rom.	Process	Incram.	Internal	Admin.	Small	-	-
4. Poland	Service	Incram.	Int/Ext.	Citizen	Small	O	Internal
5. Est.	Service	Radical	Internal	Admin.	Large	O	Internal
6. Czech.	Process	R/I ?	Internal	Admin.	Large	S	Internal
7. Poland	Service	Incram.	Internal	Admin.	Small	S	Internal
8. Slov.	Process	Radical	Int/ext.	Admin.	Large	O	Internal
9. Rom.	Service	Incram.	Internal	Citizen	Small	O	Internal
10. Czech.	Service	Incram.	Internal	Citizen	Small	O	Internal
11. Poland	Process	Incram.	Internal	Ad/Cit.	Small	S	-
12. Cyprus	Process	Incram.	Internal	Admin.	Small	O	Internal
13. Est.	Process	Radical	Int/ext.	Ad/Cit.	Small	S	Int/Ext
14. Poland	Service	Incram.	Internal	Ad/Cit.	Small	S	Internal
15. Slov.	Service	Radical	Int/ext.	Citizen	Large	O	Int/Ext
16. Est.	Process	Radical	Int/ext.	Ad/Cit.	Large	S	Int/Ext

Fig. 1. Innovativeness and Transferability Scores of CEE-EPSA Applications.

7. Some Findings.

Although the number of participating CEE countries in the EPSA competition is too small, and the character of a pilot study does not allow to draw hard and fast conclusions, a certain profile of ICT applications by these countries comes to the fore. It is important to keep in mind that these findings are based on estimates, evaluations and reports produced by the competing countries themselves.

A first impression is that some countries are more active in this field of endeavor than other countries. Estonia is a good example in this respect. Despite its rather small size it has sent in 4 ICT applications. Poland with its large population, compared to the other CEE countries, has also sent in 4 ICT applications. The most active countries in this field of endeavor are represented with at least 2 applications. Not being present as a country in competitions, as the one organized by EPSA and others may be an indication of a secondary position in the ICT field.

Secondly, innovations may take place in processes as well as in services. In this pilot study the attention is evenly spread between process (re)design and (re)formulation of the content of services. The Estonian project in Tallin (no. 1) is a good example of the (re)formulation of a service to pupils, teachers, school management and local government. The Estonian project in Tartu (no.13) is an example of the (re)design of a process that improves the internal efficiency and external accessibility as bureaucratic values.

As far as the focus of the ICT applications is concerned, the outcome is that four applications are oriented on improvement of both citizen service and administration. The other applications are evenly split between these orientations. The same number (6) that is directed to create or improve a service is directed to create or improve an internal administrative process. In combination with indications about the orientation of the applications on the public administration itself or on the citizens (in colon 4 of Fig. 1), this balance is corroborated: exactly half of the applications are wholly or partly citizen oriented, and half are administration oriented. However, as far as the process oriented applications are concerned, 7 out of 8 are predominantly centered on the administration itself.

Thirdly, most innovations, although perhaps experienced locally as radical changes, represent only incremental shifts of the organizational arrangements through which the changes of processes or services are realized. For an outside observer, the size of most of these changes is small. The supposition, in section 4 of this paper that real or radical innovations are per definition multidimensional, seems to be corroborated. Interestingly, all radical innovations, apart from one application, were at the same time the larger ones. The initiative of those innovations came from inside as well as from outside the innovating organization.

Fourthly, as far as the transferability of the applications is concerned, given the situation in which CEE countries in the area of ICT exist, country wide and international projects are the exception more than the rule. The organization that initiates the ICT project is also the main focus of the innovation. Only a few projects are, in principle, suitable for application in the sector to which the initiating organization belongs. It is therefore a matter of course that the factual transfer of innovations is limited to internal addressees.

Finally, the dominant profile of EEC applications in the framework of EPSA is:

- a mostly internally initiated ICT project;
- introducing rather incremental changes;
- containing adaptations on a small scale;
- transferable to the own organization/sector;
- or in fact transferred within the organization.

8. Final Remark. Creation of a "Learning Platform"?

In view of the examples described in this paper, the idea of the creation of an ICT "learning platform" through which the CEE countries can exchange experiences and insights with respect to informatization is very inviting.

The following steps to realize this idea might be taken by the NISPACEE as a common endeavor of the members of the Working Group on e-Government:

- a. the existing databases concerning international and national award competitions with respect to ICT applications, such as the ones mentioned in this paper, could be traced, e.g. via internet, and the applications by CEE countries selected there from.
- b. Next to that, projects deemed exemplary by members of the e-government Working Group could also be selected for the learning platform and discussed with those members of the Group, who are specially interested in them.
- c. the projects submitted by the CEE countries can be analyzed by the members of the Working Group with respect to their innovativeness and transferability, and if necessary described in a case study. The considerations derived from the pilot study, and explicated in this paper can be taken into account.
- d. Although innovativeness and transferability are selection criteria for the learning platform, they are not the only ones. Partly overlapping criteria are: sophistication of forms of interactivity, redesign of procedures, transformation of organizations, formation of strategic alliances with societal partners, creation of opportunities for democratic participation, citizen friendly arrangements and support, mature mid-office approaches, etcetera.
- e. The members of the Working Group may function as ambassadors for the learning platform, looking actively for possible best practices, acting as intermediaries to get collaboration of authorities in their home country.
- f. As indicated, they can evaluate and contribute new applications to the learning platform. Furthermore, they might want to follow and monitor the life cycle of an application already included in the platform and investigate the relation between innovation, transferability and actual impact/usability of that application. In this

way they might contribute to the framework of the learning platform in terms of criteria, scoring methods, etcetera. This approach could possibly further also that on the national level of the EEC countries European solutions for informatization are chosen³.

³ The author thanks Vincent Homburg, Marcel Thaens, Ljupco Todorovski and Sandra Van Thiel for their very valuable comments.