

NECESSARY STEPS FOR SUCCESSFUL TRANSITION FROM CLASSIC COMMUNICATION OF PUBLIC ADMINISTRATION AUTHORITIES WITH THE CITIZENS TO ELECTRONIC

Hana Jonášová, Hana Kopáčková, Monika Kašpárková

University of Pardubice, Faculty of Economics and Administration, Institute of System Engineering and Informatics

Abstract: *The first part of this paper is focused on a legislative support for a transfer of chosen services (agendas) of a community to e-form. The second part is about analysis and mapping of the process flow of these services. After that, evaluation and the description of problems which are connected with this transfer follow, according to project held the Municipal authorities in Jičín.*

Keywords: *e-Government, life - event, portal of a public control, transmission to e-form, process modeling methods FirstStep, public service*

1. Introduction

Electronic public administration has a specific position in the background of post-communist countries. The Czech Republic is not exception. Although investments in computer technologies, as it is obvious from, at all levels of public authorities have not been small in recent years, offering and availability of electronic services have rather stagnated [14]. E-Government refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with citizens, businesses, and other parts of government. E-government aims to make the interaction between government and citizens (G2C), government and business enterprises (G2B), government and employees (G2E), and inter-agency relationships (G2G) more friendly, convenient, transparent, and inexpensive. [6, 3, 18]

There are as many definitions of e-government as there are people who have thought about it. Some definitions might only refer to online information or transaction services to citizens. Others include automated business relations with companies and enterprises. But most recent definitions cover all aspects of digitized processes and interactions within the government, between governments, and between the government and business and citizen.

Common schema [1], [4] for description of evolution of e-government projects distinguishes 5 stages. The schema is based on the degree to which the properties of information technology have been utilized to enable the delivery of services electronically.

Emerging Presence - a government web presence is established through a few independent sites of central government. Information is limited, basic and static. Links to regional/local government may/may not exist; some archived information may be available on line, most information remains static with the fewest options for citizens.

Enhanced presence - content and information is updated with greater regularity. The government provides greater public policy and governance sources of current and archived information, such as policies, laws and regulation, reports, newsletters, and downloadable databases. The user can search for a document and there is a help feature and a site map provided. The interaction is still primarily unidirectional with information flowing essentially from government to the citizen

Interactive presence - users can download forms, contact officials, and make appointments and requests. Audio and video capability is provided for relevant public information. The government officials can be contacted via email, fax, telephone and post. The site is updated with greater regularity to keep the information current and up to date for the public.

Transactional presence - users can actually pay for services or conduct financial transactions online. It includes options for paying taxes; applying for ID cards, birth certificates/passports, license renewals and other similar C2G interactions by allowing him/her to submit these online 24/7. The citizens are able to pay for relevant public services, such as motor vehicle violation, taxes, fees for postal services through their credit, bank or debit card. Providers of goods and services are able to bid online for public contracts via secure links.

Seamless presence - total integration of e-functions and services across administrative and departmental boundaries. Through interactive features such as the web comment form, and innovative online consultation mechanisms, the government actively solicits citizens' views on public policy, law making, and democratic participatory decision making. Implicit in this stage of the model is the integration of the public sector agencies with full cooperation and understanding of the concept of collective decision-making, participatory democracy and citizen empowerment as a democratic right.

This trend of building of e-government is expected to make better cooperation of the authorities of public administration and make the public administration more transparent and more effective.[8] To have more and more services available on-line is not the only goal; much important is the utilization by users. [10] If citizens contribute to the design of online services, there is greater uptake and higher approval ratings.

2. Situation in the Czech Republic

In the view of international measures, e-government in the Czech Republic is on the high level [9]. For example report [2] evaluates central government websites in 193 states according to the Web Measure, the Telecommunication Infrastructure index and the Human Capital index. Web measure index evaluates how many websites are on each stage, described above. The Czech Republic is rated as 21st in web measure index, having 8 sites in emerging stage, 77 in enhanced stage, 79 in interactive stage, 22 in transactional stage and 7 being absolutely integrated.

The Portal of the public administration is this one main information resource of all the system of services within e-Government in the Czech Republic. The Portal of the public administration serves as a unified entrance gateway into the official electronic world of the Czech Republic. It serves citizens, enterprises and institutions that can e-communicate by the means of the Portal with the public administration. It centralizes all necessary information about the authorities of state administration and self government in one place. It also provides remote access to topical and certified information, and to services of public administration, including electronic transactions. [17]

The amendment of the Act No. 365/2000 Coll., on information systems of the public administration and on the change of some other acts in the wording of later regulations came into force on 1st January 2008. The amendment of this law was carried out by passing the Act No. 269/2007 Coll. This law modifies and implements the project CZECH POINT [20], which is the necessary part of the development of e-Government.

The proposed e-Government Act will equalize electronic and paper forms of a document and will legalize their conversion. It means that both types of a document will have the same

legal effects. This act also proposes the system for the identification of a person who is communicating with the authorities by the means of electronic appliances, and defines an electronic data box. The delivery of documents from public administration authorities to a citizen and vice versa will be proceeded by this electronic data box.

Two deadlines of force are stated in the proposal of this act: 1st January 2009 and 1st January 2010.

The purpose of the e-Government Act is to contribute to the simplification of administration, to ease the communication of citizens or businessmen with public authorities and to ensure easy and remote accessible interchanging of information.

On 25th March 2008 the Ministry of Interior of the Czech Republic sent the draft of the law on registers into marking up proceedings. It concerns the law which will make the connection of all data registers possible. After approval of this law, citizens will not have to call round individual authorities, however, they will only put in an application in one place, and services (agendas) will transmit the information on the applicant to one another. According to the intentions of our government, this act will be submitted to the Chamber of Deputies in June 2008 and to the Senate in November 2008. Entry into force is assumed to be on 1st July 2009. [11]

3. Problem Formulation

The paper is focused on building of e-government services, which is now very hot topic in the Czech Republic.

Main aim of the project was to find out which services have a full legal environment so they can be transformed to electronic form. Identification of possible problems for the transmission of these services into electronic form was the next aim.

Modernizing of administration acts and using of methods and procedures from enterprise area makes possible to understand the role of information and its influence to basic relationship "citizen - public administration". Information systems in public administration become nature centre of democracy. Traditional hierarchical management model is substituted by process model. Configuration and management of processes in public administration conditioned the cost-effectiveness of municipality performance and lead to reengineering of processes.

3.1 Contextual Basic Legislation

The Act No. 101/2000 Coll., on Personal Data Security

The Act No. 269/2007 Coll., Amendment of the Act No. 365/2000 Coll., on Information Systems of Public Administration

Modifies and implements the project CZECH POINT

The Government Statute No. 495/2004 Coll., by which the Act No. 227/2000 Coll., on Electronic Signature, is administering

Draft of e-Government Act, 2008

Electronic agendas

Personal numbers (e-Identity)

Authorized conversion of documents (e-Documents)

Electronic boxes

4. Problem Solution

We used process modeling for solution to this problem. It is integral part of process analyses that makes for detailed identification and specification of processes, their structures, owners, inputs, outputs, limitations etc. The process model provides graphical presentation (see table 1, 2). It makes easy cooperation with everyone who participate in process analyse or who make use of results of process analyse only.

We applied the tool of mapping -First Step for the process modeling. It is path of reengineering of processes in the public administration. First Step is loading consist, that much management don't appreciated, that everything what located in organization is determination of processes. [15]

The processes were described for processing of this analyse and produce proposal of process flow model as word description and were described per the process map and the model of context of the process.

The model of context of process describes the process environment, its inputs, outputs, the acts and entities which participate in running of process (Table 1).

Table 1 – Notation for model of context of process










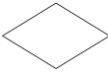



Notation	Legend
	Process
	Prescript (Act)
	Document
	Participant
	Team
	Software
	Product
	Link (connection)

Table 2 – Notation for process map

Notation	Legend
	Process start (beginning)
	Decision
	Activity
	Process end (finish)
	Process flow

4.1 Procedure of Work

The project, which is concerned with the conversion of individual services of authorities of public service into electronic form, was created in cooperation with the municipal authorities in Jičín. Particularly we were interested in a legislative support of these conversions. Taking into consideration that the Municipal authorities in Jičín administer a high number of public administration services, at the first we had to select only some of them for the next analysis. Purpose following criteria was defined for the selection:

- services had to be in the competence of municipality with extended powers
- services had to be related to life events.

In according to these criteria 34 services were selected (e.g. social contribution, charge for household waste, building permission...)

Then only services with the legislative support were selected, because would be ineffective include in this stadium of the project services that have not legislative support yet. The process flow models of these services were created and possible problems of their transformation into electronic form were identified.

4.2 The Analysis of Selected Services

To analyse the acquired information, the described services were arranged according to the organizational structure of the Municipal authorities in Jičín. [12] The following structure was picked out:

- Order of services in according to the department they belong
- Contextual legislation
- Types of obstructions of the transmission into electronic form
- Reasons
- Applicant

- Necessary conditions
- Ways of submission
- Documents
- Charge
- Necessary amendments for the transmission into electronic form

To save money and time, electronic services must be implemented in appropriate way. First necessary step before implementation is analysis of the process and creation of data and the process model. [19] In the next step, it is necessary to check the whole process and possibly carry out reengineering. Processes should be reorganized around the needs of customers and integrated so that users can seamlessly access services on-line. Only after this revision the service can be transformed into electronic form. Consequently the process model of present situation was created for every life – event in the next stadium. Scheme was proposed to make results more readable, see following points:

- Proposal of notation
- Process models
- Model of context of the process
- Word description
- Brief outline in tables

4.3 Case Study

For clear arrangement and for the reason of a limited extension of the contribution, our services described in detail are converted into the appended table 3. The legislation corresponds to the legal regulations according to which the individual life - events are arranged. “The charge” stated in the chart just informs whether a charge exists or not. Its amount is not mentioned. “The electronization” describes if the particular life - event can be converted into e-form. If the conversion is impossible, some of the following causes are shown in the chart:

- subject (technical) obstruction – it is some technical condition that has to be achieved,
- legislative impediment - legal regulations (law, public notice) obstruct the conversion to e-form.

The last column called “The premise of elimination of obstructions” shows an expected date of the removal of the causes. [7]

Table 3 - Brief outline of selected services (show case from overview); Source [7]

Title of a life event	Legal regulations	Charge	E-form	Impedimenta		Premise of elimination of obstacles
				Subject (technical)	Legislative	
Issuance of a driving license	361/2000 31/2001 634/2004	yes	subject obstruction	signature, insertions	none	1.7.2009
Application for an extract from an evidence card of a driver	361/2000	yes	it is possible	none	none	
Change surname, first name	301/2000 207/2001 94/1963	no / yes	subject obstruction	Cogency of public documents in e-form	none	1.7.2009
Social contributions	117/1995	no	it is possible, but only with electronic signature	none	none	
Issuance of a shooting license	449/2001 244/2002	yes	subject obstruction	insertions	none	1.7.2009
Request for permit of building of waterworks	254/2001 274/2001	yes	subject and legislative obstructions	a lot of insertions, receipt of payment	132/1998 432/2001	
Request for permit of disposal with water	254/2001	yes	subject and legislative obstructions	a lot of insertions	432/2001	
Extract from public part of the trade register	455/1991	yes	subject obstruction	identity card, official stamp	none	1.7.2009
· ·	· ·	· ·	· ·	· ·	· ·	· ·

Because complete description of the selected processes is quite huge, only a brief example of one process description is provided in the paper. We follow this approach here by analyzing situation when a citizen wants to change surname or the first name.

Applicant:

The citizen of the Czech Republic, eventually legal representative of under age citizen of the Czech Republic, or person, who is not citizen of the Czech Republic, but who has permit to permanent staying, can ask the register office for changing the name or the surname.

When submit application:

Changing surname is enabled especially when the surname is pejorative, humorous, or when is it some important reason.

Where submit application:

Department of the Register office - register

Contextual Legislation:

- The Act No. 301/2000 Coll., on the civil registration, the register, first name and surname,
- The Notice No. 207/2001, what administer the law about the register, first name and surname,
- The Act No. 94/1963 Coll., on family,
- The Act No. 500/2004 Coll., on the administrative rules,
- The Act No. 634/2004 Coll., on the administrative charge.

Word description of process:

1. Citizen gives the department of register office personally or through post delivery written application for changing the name or surname. Prescript application form is not established, but application must contain terms of the Act No. 301/2000 Coll., on civil registration, registry, first name and surname as from time to time amended. Citizen can also use “application for changing surname”, which is available at the department of register office. It is necessary to attached demanded documentation by the Act No. 301/2000 Coll., on civil registration, registry, first name and surname as from time to time amended.
2. Application is evidence by officer the department of register office into evidence book, in the case of post delivery to the post book.
3. Officer of the department of register office check formal and factual correctness of application and completeness of documentation.
4. In case of missing information, eventually some of information is incorrect, or some document is missing, officer of register office call applicant for completion of belongings.
5. Citizen can (decide) complete belongings on the spot.
6. Application is adjournment when citizen could not complete belongings on the spot in the application or did not submit all documents (according to law) or did not paid the administrative change.
7. When citizen could complete belongings on the spot in the application officer of register will verify (check) authenticity of these documents.
8. Officer by the register call on applicant, in case that any document is not missing according to law, to pay the administrative charge. Rate of this charge is delimited on the Act No. 634/2004 Coll., on the administrative charge as from time to time amended.
9. Citizen pays the administrative charge in the cash desk of the municipality. The Officer of cash desk of the municipality issues a pay receipt. Citizen has to apply to application the check coupon (in the case of post delivery)
10. The officer of the register checks payment administrative charge.
11. The register decides on change of first name or surname within 30 days of the opening of proceeding. When case is complicated the register decides at the latest to 60 days. The officer of the register notifies the applicant to decision by letter. When application is disallowed the officer conveys reasons for rejection.

12. When the application for enable of change of first name or surname is disallowed citizen decides whether he will agree or will interpose an appeal against decision.
13. The citizen, who does not agree with decision by the officer of register will interpose the appeal against the decision to 15 days since the service.
14. The department of register office relegates the case to the authority of appeal.
15. If the citizen did not interpose the appeal against the decision within of statute of limitation officer of the register will close case and will entry documents into the document collection.
16. The office of register earmarks change of first name or surname to identity card and call applicant's attention to necessity of submission application for new identity card.
17. Change of first name or surname is written to information system of register, born – book and civil registration.
18. Documents are saved into the document collection at the conclusion.

Above you can see brief outline of selected services (table 3), and below show from scenario (table 4), an example of model of context of the process (figure 2), process model (figure 1 - used to represent life – event model in this paper are prepared following the methods FirstStep process map).

Table 4 - Scenario of life - event Change of first name, surname (show case); Source own

Step	Title	Type	Participant	Documents
1	Submission application	Beginning	Citizen	Application, documents
2	Evidence of application	Activity	Department of Register office	Evidence book
3	Check of application	Decision	Department of Register office	(Missive), Message
·	·	·	·	·
·	·	·	·	·

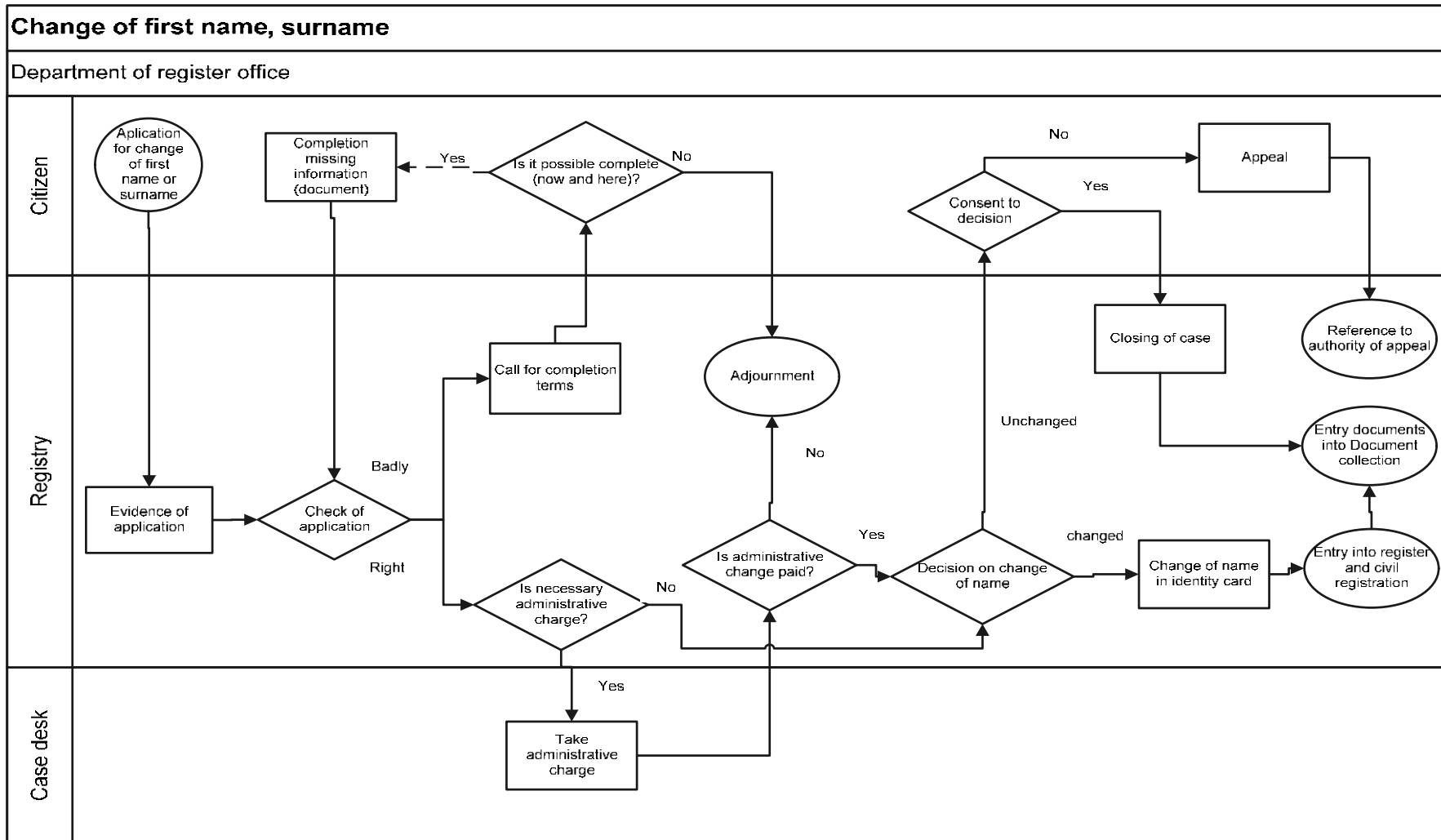


Figure 1 – Process model for life - event Change of first name, surname; Source own

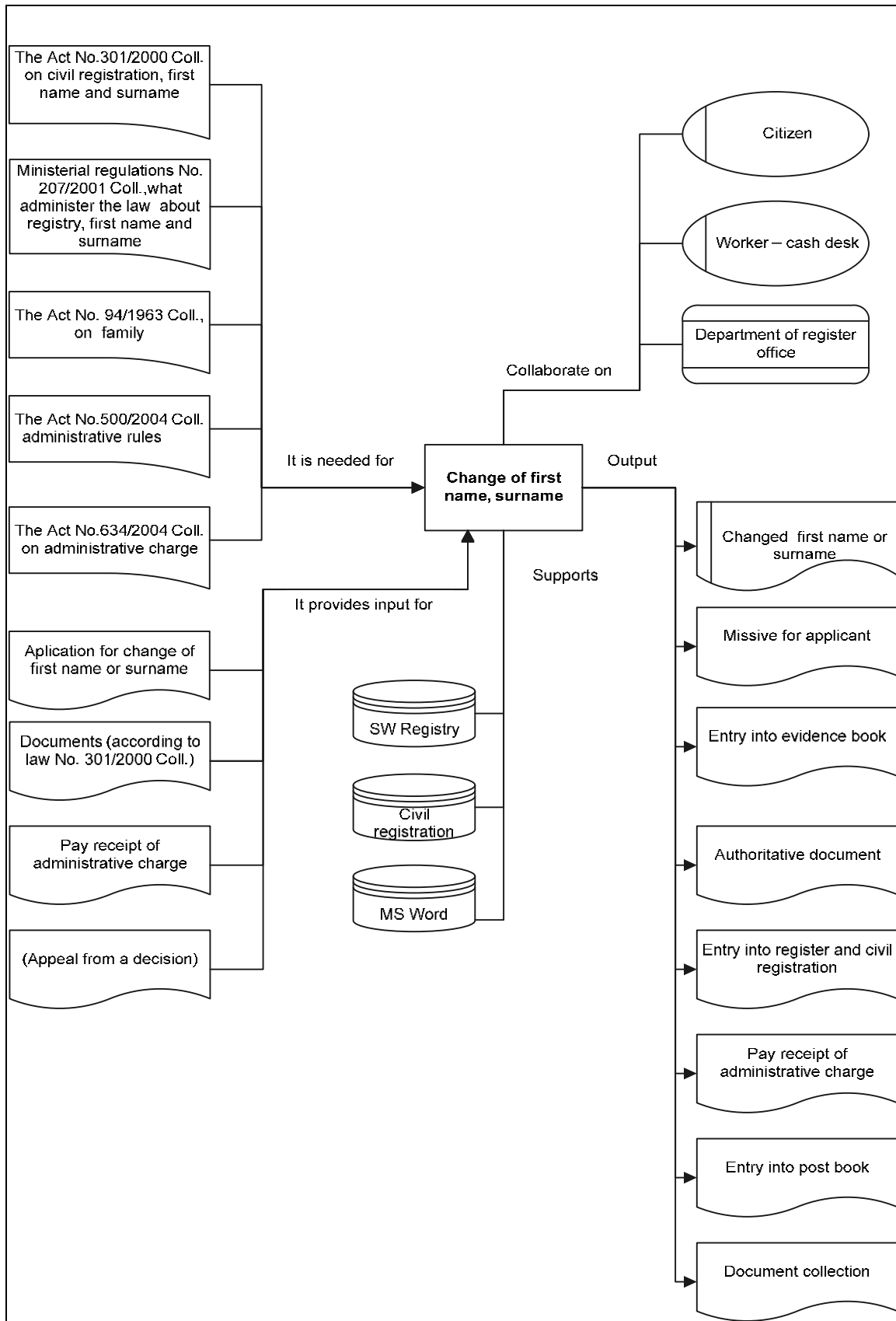


Figure 2- Model of context of the process for life - event Change of first name, surname; Source own

5. Conclusion

At the very end let finish our work with some concluding remarks. The effectiveness of a government is determined by the ability of public administration to deliver quality service and to measure and monitor citizen satisfaction. Unfortunately there are some important problems connected with implementation of services. Here is brief description of possible obstructions:

legislative - connected to legal environment (enforceability of the legal regulations);

organizational - next optimalization of the processes must be done, otherwise hardly any benefits will be obtained from their transformation to electronic form;

technological – IT utilization and development of Portal of the public administration;

motivation - an adequate motivation of both citizens and civil servants is of course necessary;

financial - the last but not least problem is connected to financing of the transformation of services into electronic form. It can be difficult for some municipalities to get all money.

As you can see from the analysis, even today (without an existing law on e-Government) some municipal services are available for the conversion into e-form. To be able to use these electronic services, citizens have to have a verified electronic signature, which is supported by the Act No. 227/2000 Coll. on electronic signatures.

Two main problems, legislative and subject, obstruct the conversion of services to e-form (more types of barriers are discussed in [16]). In strategic documents of state information politics there are fixed goals, procedures and deadlines till when everything should have been prepared and able to work. Unfortunately, reality is different. The deadlines have not been kept. Nevertheless the situation in the Czech Republic is not exceptional. For example British House of Commons in their report [5] stated: “The quality of government websites has improved only slightly since 2002”.

It also concerns the expected law on electronic operations, identity numbers and the licensed conversion of documents, and on the change of some laws (the mentioned law is called the Law on e-Government in short). This law (with assumed effectiveness as from the 1st July 2009) should eliminate subject impedimenta. Legislative obstructions are individual and concern the legal regulation that amends the particular service. Perhaps the biggest difficulties of the conversion of services to e-form are documents which have to be submitted by a citizen to authorities. In electronic communication the documents will be sent as enclosures of e-mail.

A citizen has to arrange for the paper document to be converted to an electronic form. The conversion (a licensed conversion) of documents will be carried out by the subjects determined by the law. Legal protection of the data connected with this process is necessary. The unification of sharing data from the registers of public administration is another legislative obstruction. Insufficient financial resources for the technical equipment of authorities and the preparation of their staff are also significant problems that obstruct the conversion.

The major factors that may influence the implementation of e-Government include; education, change of culture, change in attitudes, applying the business model and involving citizens. One factor alone cannot solve the e-Government problem but the synergy of all the factors will facilitate the implementation of effective e-Government and delivery. [13] The

Legislative Support for the Transmission of Services into E-Form has to be inseparable part these changes, vice versa.

References:

- [1] Benchmarking E-Government: A Global Perspective [online] [cit. 2003-03-27] <<http://www.unpan.org/e-government/Benchmarking%20E-gov%202001.pdf>>
- [2] From E-Government to Connected Governance, In Un E-Government Survey 2008 [online] <http://unpan1.un.org/intradoc/groups/public/documents/UN/UNPAN028607.pdf>
- [3] GISLER M., GUNTER M., SPAHNI D., 'Minitrack eGovernment', Proc. of the 34th Hawaii International Conference on System Sciences, IEEE Press: 2001.
- [4] Global E-Government Readiness Report. United Nations, Department of Economic and Social Affairs Division for Public Administration and Development Management, New York, 2005.
- [5] Government on the Internet: Progress in delivering information and services online. House of Commons, Committee of Public Accounts. Sixteenth Report of Session 2007–08. 31 March 2008.
- [6] International Tracking Survey Report – Number 1. E-government, E-governance and E-democracy: A Background Discussion Paper. [online] [cit. 2004-05-2] <http://www.electronicgov.net/pubs/research_papers/tracking5/IntlTracking%20Report%20Number%201Jan02.doc>
- [7] JONÁŠOVÁ, H., KOPÁČKOVÁ, H., VLACHOVÁ, M. The legislative support for the transmission of services into e-form. In New Aspects of Communication. Proceedings of the 12th WSEAS International Conference on Communication. Greece: WSEAS Press, 2008. ISBN 978-960-6766-84-8. ISSN 1790-5117. s. 396-400.
- [8] JURÁŠKOVÁ, RENATA, ŠIMONOVÁ, STANISLAVA, VOMOČIL, MARTIN. e-Government - kvalita poskytovaných služeb. Scientific papers of the university of pardubice 10, Series D. Pardubice: Univerzita Pardubice, 2006. s. 69 – 73. ISBN 80 – 7194 – 851 – 9
- [9] KOPÁČKOVÁ, H. Measuring e-government – The Czech Republic in the View of International Evaluation Methods. WSEAS TRANSACTIONS on INFORMATION SCIENCE AND APPLICATIONS, Issue 5, Volume 1, November 2004, s. 1277 - 1282, ISSN 1790-0832.
- [10] LEE, K.J., HONG, J.H. Development of an E-Government Service Model: A Business Model Approach. International Review of Public Administration, Vol. 7, No. 2, 2002.
- [11] Legislativní záměry vlády v oblasti ICT. [online] <<http://www.issc.cz/program.asp>>.
- [12] Město Jičín - Struktura úřadu. [online] <http://www.mujiicin.cz/vismo/o_index.asp?u=5954&id_org=5954&d=1&p1=34389>.
- [13] NYABOGA, A.B., MWAURA, M.F. E-Government: The Implementation Of Effective Digital Technologies To Improve The Delivery Of Government Services To Their Consumers (Citizens). The Review of Business Information Systems. Volume 10, Number 1, 2006
- [14] Online Availability of Public Services: How Is Europe Progressing? In i2010 – Report of the 6th Measurement, 2006 [online] <http://ec.europa.eu/information_society/eeurope/i2010/docs/benchmarking/online_availability_2006.pdf>
- [15] ŘEPA, V. Podnikové procesy: procesní řízení a modelování. Praha. Grada 2006. ISBN 80-247-1281-4

- [16] Solutions for eGovernment: How to Break the Barriers. EGovernment Unit, DG Information Society, European Commission, 2006.
- [17] ŠIMONOVÁ S., KOMÁRKOVÁ J. Data and Data Warehousing for Management of Small Region – from the Czech republic Point of View. WSEAS TRANSACTIONS on INFORMATION SCIENCE AND APPLICATIONS, Issue 1, Volume 1, 2004, s. 184-188, ISSN 1790-0832.
- [18] The E-Government Handbook for Developing Countries [online] [cit. 2003-03-27] <<http://www.infodev.org/projects/government/704toolkit/egovhandbook.pdf>>
- [19] TODOROVSKI L., KUNSTELJ M., VINTAR M. Reference Models for E-Services Integration Based on Life Events. Lecture Notes in Computer Science, Volume 4656/2007 Springer Berlin / Heidelberg, ISBN 978-3-540-74443-6
- [20] What is Czech POINT. [online] 2008 <<http://www.czechpoint.cz/pages/oprojektu/cojeczechpoint.php.html>>.

Contact address:

Hana Jonášová, Hana Kopáčková, Monika Kašpárková
University of Pardubice
Faculty of Economics and Administration,
Institute of System Engineering and Informatics
Studentská 84, 532 10 Pardubice
Czech Republic
Email: hana.jonasova@upce.cz,
hana.kopackova@upce.cz
monika.kasparkova@student.upce.cz
phone: +420 466 036 037