

Evaluation of data box introduction process in the Czech Republic

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Abstract

One of base building stones of eGovernment development in the Czech Republic is so called Data boxes which were introduced to unify communication and to increase efficiency in public administration. The aim of a study carried out by the Department of Information Technologies was to analyze the implementation procedure and to use data boxes. The questioning took place in December 2009, i.e. c.6 weeks after introduction of duty to use a data box.

Obtained results are important above all because the development process of eGovernment still does not end. The suggestion from data box implementation can significantly facilitate introduction of basic registers and other applications.

Key words

eGovernment, Data box, 300/2008 Col., 111/2009 Col., Basic registers.

Anotace

Jedním ze základních stavebních kamenů rozvoje eGovernmentu v České republice jsou tzv. Datové schránky, které byly zavedeny za účelem sjednocení komunikace a zvýšení efektivnosti ve veřejné správě. Cílem studie prováděné Katedrou informačních technologií bylo analyzovat postup implementace a využití datových schránek. Dotazování probíhalo v prosinci 2009, tzn. cca 6 týdnů po zavedení povinnosti datové schránky využívat.

Získané výsledky jsou důležité především z důvodu, že proces rozvoje eGovernmentu ještě nekončí. Ponaučení z implementace datových schránek tak může významným způsobem usnadnit zavedení základních registrů a dalších aplikací.

Klíčová slova

eGovernment, Datová schránka, 300/2008 Sb., 111/2009 Sb., Základní registry.

Introduction

„eGovernment can be defined as a set of processes leading to a performance of state administration and self-government and use of civil rights and duties of individuals realized by electronic means“ (Štědroň, 2007). At present, the main electronic mean is the internet and a number of internet users is just one of informatization indicator (Vaněk, 2010). It indicates to which degree the given country uses information technologies and which it has prerequisites for use of eGovernment.

Electronic public administration is not only a service for citizen and firms, but it should facilitate

and fasten negotiations even in frame of the public administration itself. To remove caretaker bureaucracy it is necessary to transform internal processes. Without it the eGovernment will not be able to provide quality services (Jupp, 2003). The eGovernment introduction can also help to remove bribes which still more and more appear in the public administration. Within transparency in the public administration people are also more interested in public matters and thereby their participation in creation of democratic process grows (Liikanen, 2003). In this sense it is spoken about e-democracy (Maria, 2005), so citizen acts directly on the state management. With this also a term eCitizenship is connected which is used from a

point of view of a citizen as a user of public administration services using his/her rights and an active participant of public life. However, the simplification of internal processes can not be achieved only by the eGovernment but it is necessary to start a re-engineering of work process and subsequently to create an adequate legal regulation (Davison, 2007). Legal regulations are the principal documents in the area of eGovernment because without them eGovernment can not be developed (Mayer, 2006).

One of the main building stones of eGovernment development in the Czech Republic are so called Data boxes which were introduced to unify communication and increase efficiency in the public administration. They are determined for individuals, self-employed individuals and legal entities, and for public power bodies (PPB), and PPBs have to use it compulsorily, other persons can choose the way of communication. The communication with PPB is free of charge, the communication among PPB mutually is covered from the state budget, and the price for sent message is roughly by half lower against a letter mail strictly private. The Law No. 300/2008 Col., on electronic operations and authorized document conversion, by which the data boxes are introduced, had been amended still before coming in force by the Regulation No. 190/2009 Col. Further, public notices No. 193 and 194 from 2009 set details about implementation of authorized conversion and about a practice of data box information system. The original law came in force on 1.7.2009, but the amendment introduced a transitive period, so use of data boxes was officially started on 1.11.2009.

By the law, the data box is an electronic store serving for delivery by authorities of public power and execution of acts towards public power bodies. PPBs are for these purposes state authorities, bodies of territorial self-government units, the Land Fund of the Czech Republic and other state funds, health insurance companies, Czech Radio and Czech Television, self-government chambers found by law, notaries and legal executors. The data box has to be compulsorily found by PPBs and legal entities entered in the commercial register. A data box can be installed to individuals and self-employed individuals on request. Tax consultants and lawyers can found a data box voluntarily, however,

compulsorily from 1.7.2012. PPB has to use the data box compulsorily in communication with other PPB and all persons which have found a data box. Vice versa, individuals, self-employed and legal entities can choose whether they will use for communication with PPB a data box or a classical form of letter.

Originally, a data box could not be used in communication between individuals and legal entities mutually. However, it was enabled by an amendment – from 1.1.2010 to 30.6.2010 it is possible to send invoices and calls for payment by means of data boxes; from 1.7.2010 also all documents whose character enables to send them electronically. Such a document is not e.g. an identity or other cards, plans, maps, and also a document containing secret information. An official schedule of data box introduction procedure is represented in the table 1.

The Data Box Information System (further only „DBIS“) is an information system of public administration which contains information about data boxes. DBIS governs information about when, to whom and who sent something, but it can not register a record about the content of communication. DBIS administrator is the Ministry of Interior of the Czech Republic; the DBIS operator is Česká pošta, s.p. (Czech Post).

Methodology

The aim of study realized by the Department of Information Technologies was to analyze the implementation procedure and use of data boxes. The questioning took place in December 2009, i.e. c. 6 weeks after introduction of duty to use data boxes. The research was carried out by form of answers to questions:

1. Implementation procedure of data boxes (DB) in an organization (training, instalment, electronic signature,...)
2. Way of work with DB.
3. Electronic circulation of records in the organization.
4. Positives of DB use in the organization.
5. Negatives of DB use in the organization.

It was monitored 63 organizations (50 from the area of public administration and 13 entrepreneurial subjects) from NUTS South-West.

Term	Content
1. 5. 2009	Start of pilot verification of DBIS in chosen authorities and organizations.
1. 6. 2009	Start of opened interface for DBIS users for testing purposes.
1. 7. 2009	Start of DBIS operation.
1. 11. 2009	Latest date of activation of data boxes found by law.
1. 1. 2010	Opening of commercial communication among data boxes of individuals, self-employed individuals and legal entities mutually, only for invoices and similar calls for payments.
1. 7. 2010	Opening of commercial communication among data boxes of individuals, self-employed individuals and legal entities mutually, without limitation.
1. 7. 2012	Latest term of activation of data boxes of lawyers and tax consultants.

Source: Ministry of the Interior of the Czech Republic, 2009

Table 1.: Schedule of data box introduction.

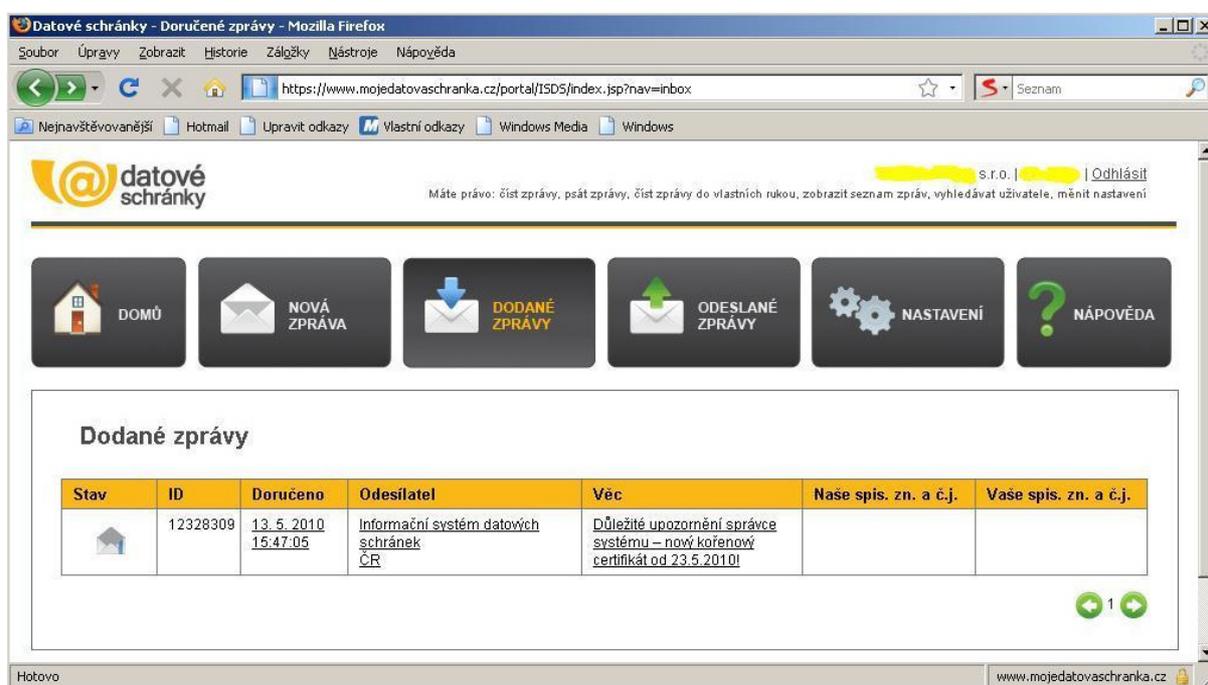


Figure 1: Sample Data boxes (Jarolímek, 2010).

Within results analysis, a method of description, comparison and induction is used.

Results and discussion

From the obtained data, 5 crucial points characterizing the introduction of data boxes was defined:

introduction of data boxes was not unified

Within introduction of in the same extent wide eGovernment project in the future, a unified procedure has to be ensured and ordered an obligatory test period. Everybody explained data

boxes for oneself; particular employees passed training in various rate and in some organizations there was no test period at all, therefore the employees could not be able to use the data boxes properly.

an appropriate time was not delimited for their implementation

An optimal time for implementation of a new system, which requires a change in internal norms, is 9 – 12 months. However, in case of data boxes an amendment of law was made in June and the system should have been fully functional already in

November. It means only 4 months for preparation which is insufficient. Therefore, above all large organization did not managed all in time and the data box service is not used efficiently.

the data box application is not sufficiently technically and user elaborated

The work with data box was made difficult partly just by the impossibility to try it and partly by technical problems which are removed during the own use. So, in the test period, there should have been a consultation of the service producer with people who will regularly use it so that the service would be as much efficient as possible. The work would be certainly faster, if there were a possibility of creation of own directory because to find out addressee' data box lasts even tens of minutes now. The directory would be available only after registration and it could contain addresses at which records are sent the most often because PPBs communicate the most with persons and PPBs in its sphere of action. After a choice of address from the directory there would be only a check whether the data box was not locked up.

preservation of documents/records received in a data box is costly

If the government wants the system of data boxes to be enlarged also among individuals, it should ensure a free of charge or subsidized service for archiving of electronic documents because at present, individuals are discouraged by the fact that they will have to have converted the documents received in a data box for a fee and the supplied specialized software is relatively expensive (as many as tens of thousands crowns per months).

Another solution would be to cheapen the own conversion when for example one time fee 50 CZK for one „visit“ in Czech POINT would be paid in disregard of the number of converted documents and their pages.

ambiguous legislative treatment complicates data box development among individuals

The legislative matter of fact has to be solved up so that some statements will not be able to be

impugnable (Mayer, 2006). The public has fears at present how the data report will be probative after expiration of electronic signatures and time stamps. In PPBs the formulation „if the character of documents enables“ is problematic. It is not clear from it what is and is not possible to send by the data box. In the same way it is not known, when and what should be converted. In connection with this an information campaign and training for employees of public administration should be ensured.

Further a possibility of creation of more data boxes for one organization with more branch office should be considered. At present, it is possible to found more boxes only for territorially self-government units. Hereat, large organizations with many branch offices have one data box from which messages for the branch offices are re-sent. Thereby, the communication is protracted and moreover, there is a risk of breach of integrity of the message because it can be send by unsafe channel.

Conclusion

The achieved results are important first of all for the reason that the process of eGovernment process does not still end. On base of the law 111/2009 Col. implementation of Basic registers is presupposed. The extent and difficultness of this change of public administration functioning is manifolds bigger than in case of data boxes. So, the lesson from the data box implementation can in a significant way ease the introduction of basic registers.

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References

- [1] Mates, P., Smejkal, V.: E-government in Czech law (in Czech), Prague: Linde, 2006.
- [2] Štědroň, B.: Introduction in eGovernment in the Czech Republic (in Czech). Legal and technical guidebook, 1. edition, The Office of the Government of the Czech Republic, 2007.
- [3] Vaněk, J., Červenková, E., Jarolímek, J., Šimek, P.: State and evaluation of information and communication technologies development in agricultural enterprises in the Czech Republic, In: Plant Soil Environ., 56, 2010 (3): 144–147
- [4] Liikanen, E.: eGovernment an EU Perspective In: Journal of Politoval Marketing, Volume 2, Issue 3 & 4 June 2003, pages 65 - 88
- [5] Davison, R.: Implementing and managing eGovernment, In: Information Technology for Development, Volume 13, Issue 2, April 2007, pages 205 - 206
- [6] Jupp, V.: Realizing the Vision of eGovernment, In: Journal of Politoval Marketing, Volume 2, Issue 3 & 4 June 2003, pages 128 – 145
- [7] Meyer, A.: The Role of European Governments in the Digital Economy, In: The Information Society in Enlarged Europe, 2006, pages 125 – 150
- [8] Maria, E.D., Rizzo, L.S.: E-Democracy: The Participation of Citizens and New Forms of the Decision-Making Process , In: On Line Citizenship, 2005, pages 71-106