One-Stop Government in agriculture

One-Stop Government v zemědělství

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Abstract: The paper provides some of the interim results of the Fifth Framework PRISMA project dealing with the impact ICT on government and citizen services in Europe. In the paper, the concept of one-stop government is described, the current state of the adoption of ICT both in Europe and the Czech Republic is briefly outlined and recommendations for the Czech agriculture derived from the major trends within the development of the use of ICT for better citizen services as well as for enhancing competitiveness of rural businesses.

Key words: e-Government, One-Stop-Government, information and communication technology, Czech agriculture

Abstrakt: Příspěvek uvádí některé dílčí výsledky projektu PRISMA financovaného z prostředků 5. rámcového programu EU. V příspěvku je vymezen pojem one-stop government a stručně popsán současný stav využívání informačních a komunikačních technologií, a to jak v Evropě tak v České republice. Hlavní vývojové trendy v dané oblasti jsou pak východiskem pro formulaci doporučení pro poskytování lepších služeb občanům i pro zvýšení konkurenceschopnosti na venkově působících podniků.

Klíčová slova: e-Government, One-Stop-Government, informační a komunikační technologie, české zemědělství

INTRODUCTION

The Concept of One-Stop-Government

One-Stop-Government addresses a crucial problem of modern public administrations. In the historical process of assuming more and more responsibilities, the administration and operation of state administration has been assigned to certain, functionally delineated branches or agencies of public administration. In addition, typical divisions of legal and/or operational authority between national, regional and local levels of governments exist. The result is a *highly fragmented public sector* which does not reflect a customer's perspective, who expects or prefers to have all related concerns concerning a certain event or situation to be taken care of by one or a few, but not many service providers.[1]

Due to functional fragmentation, however, in most countries both citizens and businessmen would have to deal with many different agencies. To complicate matters, different levels of government and functional divisions are so many that in most situations citizens and business-es *do not even know who is responsible* for their concern, frustrating contacts with public administration.

One-Stop-Government is a solution for these problems, as it is strongly supported by public administration experts underscoring the crucial role of "integration" for achieving citizen- or customer-oriented government (Bent, Kernaghan et al. 1999; Office of Intergovernmental Solutions 1999).

One-stop service also means reducing the necessity to switch between different media when interacting with the public administration. Taking this into account, an *integrative approach* to the provision of electronic government services may have several dimensions:

– Integration of different agencies and *administrative levels* (e.g. federal/local).
– Integration of different *service types* (information, communication, transaction).
– Integration of different *service providers* (e.g. public/ private).

Therefore, it becomes clear that the development and operation of a one-stop service requires a high degree of co-operation and cross-agency working. Practical reali-

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[1] In today's economy, citizens are used to comprehensive services. Supermarkets offer many different kinds of foods, travel agencies sell package tours, and banks take care of everything from checking accounts to investment strategies. Turning to government, a citizen could expect to find all his needs associated with retirement being provided by a single office. So could a business wanting to build a new storage facility on its premises.

sations by public administrations therefore remain a big organisational challenge as is indicated by an only laboratory state of implementation to-date. The indispensable requirements are: continuous co-operation among different units of administration (e.g. exchange and maintenance of data), reorganisation of departmental functions, and adjustments of associated regulations and skills. If the integration of services is understood as including transaction functions, barriers as sketched above apply here, too.

There is an increasing number of private services acting as *intermediaries* between individuals and public authorities. One function of these intermediaries is taking away the burden of contacting one or several administrative offices, but they also use their professional knowledge in order to configure available services in a way that suits their customers best. A similar development can be seen in the growing co-operation of public administration with private services.

Integration, however, is not the only aspect of customer orientation: citizens want service with as little effort as possible on their side. Difficult-to-understand rules and procedures are posing obstacles for them. They also want quick service. They do not like waiting in lines or shopping around and are pleased with instant resolving of the matter. In addition, services should be easily accessible, which means convenient opening hours and service delivery points within a short distance from where they live and work.

Problem of integration

Principles of One-Stop-Government imply that government agencies need to co-operate and even, where necessary, integrate and re-engineer their structures and processes. They need to be *'joined-up'*. Such re-engineering should be considered both horizontally and vertically, as shown in the Table 1.

The terms *'integration'* and *'joined-up'*, as used here, should not be confused with *'centralised'*. Indeed, government can be both highly integrated, joined-up and de-centralised. In fact, a third *'centralised-decentralised'* dimension could perhaps be added to the diagram.

State of One-Stop-Government in the European states

One-Stop-Government in Europe, on the whole, is in an infant state. In all European countries, at least, a few One-Stop-Government projects were identified, leading to the conclusion that One-Stop-Government is a concept pervasive through all of Europe. The infant state of One-Stop-Government is also reflected when selecting projects to identify best practices: among all 98 studied projects only eleven projects satisfied criteria of actual implementation.[2]

While interest in One-Stop-Government is growing, little knowledge exists regarding crucial success factors and barriers. Filling this gap is in particular difficult, because One-Stop-Government projects are still comparatively few in number.[3]

OBJECTIVES

On September 1, 2001 authors of this paper joined the International Research Consortium within the FF Programme, Action Line 1.1. RTD Spanning Key Action I: "New models for providing services to citizens". The research team consists of researchers from six EU-18 states

Table 1. Vertical and horizontal integration of e-Government in inter-government process re-engineering

	Horizontal integration and co-operation between different government departments or agencies, including with non-government actors, such as the private sector and the third sector	
Vertical integration and co-operation between government levels: national/federal, regional, local, community	Integration of single government functions between levels, e.g. administration, education, health, employment services, etc.	Fully *'joined-up'* government, for example around life events and business activities, integration across borders, etc. Full vertical and horizontal integration.
	Traditional, compartmentalised, *'bureaucratic'* government.	Integration of multiple government functions within a geographic entity and between geographic entities (cross border).

[2] Projects which started early and have failed until today are not included in observation. Of the still "running" projects – or examples – only 18 projects out of 98 covered started in 1995 or before, only four projects even before 1990. Most projects covered were started in 1997 and 1998, indicating mostly a pilot status of the projects. Projects listed in 1999 are mostly in the planning stage.
[3] See surveys: USA – Seidle (1995): 117–138; Lips and Frissen (1997); Intergovernmental Advisory Board (1998); Bent, Kernaghan et al. (1999); Office of Intergovernmental Solutions (1999). In Europe – not many have been presented – Lips and Frissen (1997) have covered the Dutch project OL2000 and projects in Britain.

and four newly associated states. The common research project PRISMA aims to provide a systematic analysis and synthesis of current and future impacts of new information and communication technology on government and citizen services in Europe (see http://www.prisma/eu.net). This paper draws from the experience gathered so far within the PRISMA project with the aim to provide review current state of development of ICT adoption in order to improve government service for citizens – both in Europe and the Czech Republic, briefly outline the ICT policy for the Czech agriculture and in accordance with the major trends in the area formulate recommendations for the Czech agriculture.

MATERIAL AND METHODS

Paper methodology is derived form the project methodology, which is based on mapping and qualitative comprehensive analysis of current best practices provided in 18 European countries. The research team have selected hundreds of best cases which were evaluated using multi-criteria qualitative evaluation techniques. General trends and tendencies were then projected to the horizon 2010. These can be considered as drivers of future development in e-services provision.

A more detailed definition of the key word of this paper and related research – one-stop government – is provided below.

One-Stop-Government defined

Terms "single window" and "integrated service delivery" are vague and thus it is impossible to give a strict and not vague definition of One-Stop-Government. Bent, Karnaghan et al. (1999) have suggested to distinguish One-Stop-Government projects according to *purposes* and *structures*.

Classification according to *purpose*:

Projects are distinguished among three types of "gateways", which make it possible to classify most of practical projects.

• *First-Stop:* This is typically an information counter which guides the citizen to the relevant services based on his or her needs. The information counter can be realised both in a physical location or "virtually", e.g. on-line through a website or an electronic kiosk.

• *Convenience Store:* Here, many different transactional services are located in a single office or on one website. The services satisfy the needs of many different concerns of citizens. Convenience store government normally means locally decentralised government and integrates services within the jurisdiction. Also typical for convenience store government is that more complex services cannot be delivered here, as they require more service, knowledge, or time to finish.

• *True one-stop:* Like a truck-stop on an interstate which offers gas, repair services, food, and lodging, a true One-Stop-Government service integrates many, most or all services which are necessary to satisfy concerns of specific client groups or in specific events, such as family, job or location changes. These services can be integrated within one or – more advanced – multiple jurisdictions. Another meaning of one-stop service includes the dedication of a single contact person to handle all of a customer's concerns.

A second dimension along which to distinguish One-Stop-Government is the *structure* of service delivery. Bent, Kernaghan et al. (1999) suggest the following six options:
1. Owner-delivered
2. Owner-delivered in a co-located environment
3. Shared delivery through integration
4. Delegated delivery through a corporate service utility
5. Delegated delivery through an Inter-governmental service utility
6. Delegated delivery through another service provider ("Multiplexing").

Not all One-Stop-Government projects can be ranked into one exclusive category.[4]

Delivery channels comprise physical locations, websites, kiosks and call-centres.

• *Physical location:* One way to deliver One-Stop-Government are traditional office buildings or other – physical – institutions, such as dedicated "government stores". Service is face to face and often over the counter. Information technology support is needed for the front-line employees, typically to give them access to customer data and information on services of the back-office institutions integrated at the physical location.

• *Web-Site/Internet:* The Internet has proven to be a powerful new medium to deliver all kinds of services, including financial transactions. Governments can use web-sites to communicate and conduct business with their customers. Web-Sites can be accessed at home, the workplace or public access terminals (PC- or kiosk-based).

• *Kiosk:* Self-service kiosks can also be used to deliver services directly to customers. Interaction with the service provider is fully automated, including payment functions. A one-stop kiosk integrates services from different service providers. Kiosks can be spread out to a greater variety of locations than office buildings usually are.

• *Call-centre:* The term "call-centre" is in itself ambiguous and can refer to anything from a central phone number of an agency to an outsourced operating unit handling all or most client contacts for one or more agencies. In the context of this project call-centre refers to telephone applications delivering information, referral or transactional public services.

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[4] Especially, the distinction between the second and third structure is difficult: when can the delivery of services of two agencies be called integrated, and when is it only co-located; especially when the aspect of "delegation" is covered by yet another structure.

Also, intergovernmental networks and workflow applications are important components of One-Stop-Government projects.

RESULTS AND DISCUSSION

e-Government in competitive agriculture

The emerging 21st century workplace is increasingly referred to as a "knowledge-based" economy, an environment in which the ability to access information quickly is a highly valued skill. Development of the future agriculture – much more than other branches of national economies – will depend on governmental control. The special role of agriculture in sustainable development, environment protection and healthy nourishment will not do without supports, quotas and strict rules. As government becomes a player in the knowledge-based marketplace, especially governmental organisations and government workers and employees operating in rural environment will need to be increasingly flexible, responsive, and customer oriented. The most valuable workers will be those who can fill a variety of roles and rapidly master new ones. For all these reasons, computer literacy is an increasingly valuable asset for employees both in the private and the public sector.

Being the users of these e-services, farmers, entrepreneurs and citizens in countryside regions have to have an easy access to the Internet and relevant education in information technologies.

E-services based on ICT technologies offer the government some tremendous opportunities to move forward in the 21st century with higher quality, cost-effective, government services and a better relationship between farmers, citizens and their government.

A good functioning e-Government and congruous e-Administration are the base for the future rural development and competitive agriculture.

e-Governance in the Czech Republic

The role of major co-ordinator for public administrative information systems building and development in the Czech Republic (the CR), covering also regions and communities, is in accordance with the Act No. 365/2000 Coll.[5] dedicated to the *Office for Public Information Systems*. The Office is a body of the CR state administration. Publishing standards for the information systems area and testing of ability to meet those standards are major instruments for availability their competency. The evaluations are lent to independent institutions. The mission of these institutions is to ensure the evaluation of public administration information systems. The Office acts as a major contact institution for the European Commission in the area of various questions regarding information society development.

State Information Policy in the agrarian sector

The Ministry of Agriculture of the Czech Republic has adopted a strategy based on the *State Information Policy* to be governmental basic instrument, which affects a new era of information society entrance for producers and other population operating in the agrarian sector. The document includes following goals and areas of state information policy:
– information literacy
– e-democracy
– public administration information systems development
– communication infrastructure
– information systems credibility and security and personal data protection
– electronic commerce
– transparent economical environment
– stable and secure information society.

The government has adopted the *Public Administration Information Systems Building Conception* [6]. The *Action Plan of State Information Policy Implementation* (its purpose is to present preparedness of central public administration bodies to take information society vision by direct and indirect activities to real benefits felt by citizens and to present ability to put principles of co-operation with other subjects in practice, in particularly self-government and business community when trying to reach state information policy goals) was adopted by the Czech government in May, 2000. It is the most interesting instrument for filling the *State information policy goals*.

The CR joined program goals "*e*Europe + Initiative"[7] together with other candidate countries for the EU entry. The primary goal is to use opportunities, offered by the new, digital and knowledge-based economy to acceleration and economy development. The *Action Plan*, which is actualised by the government, in sense of reflection both the State information policy priority areas and *e*Europe+ is prepared.[8.]

RECOMMENDATIONS

What to do in the Czech agriculture to reach the EU level of current e-Government

1. Tie e-Government initiatives more firmly into all areas of government policy.

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[5] The Act on public administrative information systems.
[6] On 11th of October, 1999, following the Government Resolution No 525/99, Article III (see Government Resolution No 1059/99).
[7] In June 2001 at The EU summit in Swedish Göteborg (15.–17. 6. 2001).
[8] For further information, see www.uvis.cz.

2. Use e-Government to change what government does, not just do it better.
3. Measure benefits as well as costs.
4. Develop a notion of "universal service" for all citizens: access, affordability, skills, incentives.
5. Develop strategic alliances with a variety of private companies and civic and community organisations.
6. Build a portal that integrates complete range of government roles and provides paths to them based on citizen need and life situations rather than department or agency.
7. Digital democracy – transparent, open and accountable government.
8. Roll out services (e.g. using pilots, incubators, best practice and benchmarking), and learn from mistakes.

Selected recommendations for the Czech agriculture

Information kiosks

Studies show that low-income individuals, single-parent households and especially rural populations may be less likely to have access to computers and the Internet. In addition to the cost factor, some individuals may be unable or disinclined to acquire computer skills – but should be regular users of information networks. In this context, state agricultural administrative have to focus on the development of information "kiosks". These kiosks should be placed in public areas (shopping malls, banks, rural community centres, etc.), and use simple interactive processes. Specific conditions and users needs in agriculture require the governmental service providers to expand the number and variety of information kiosks available. The kiosks could be used for information on subsidies, new ordinances, health issues, employment opportunities, consumer product safety, and other topics, all in simplified formats to maximise agrarian public access.

On-line Government Phone Book

The functional logic of the yellow pages is usually somewhat less clear. A farmer knows what he is looking for, but he does not know where to start looking. These problems can improve functionally arranged "blue"[9] pages which could be available both on-line and in the local yellow pages. These could be easily located and electronically searched.

Free Digital Certificate Availability (ECDL) for all citizens

Digital certification is an important element of creating an on-line environment that ensures the trustworthiness of transactions. While various technologies can accomplish this objective, they each involve some form of digitally certifying the authenticity and integrity of data (e.g., letters and transactions) transmitted electronically across a network. A principal role in mutual e-services provision will have the electronic signature. Government should bear a differentiate amount of the cost of providing a free digital certificate to each farmer who will use the net service system and will take advantage of mutual on-line communication. This digital certificate could then be used whether the individual was acting on his/her own behalf, as a farmer or a company employee, or in any other capacity in which a signature is required.

Handle disparities in access to the Internet

A number of reports have been issued that analyse the disparities in access to the Internet according to population demographics, and discuss how those gaps are changing. According to some of these studies, some groups are less likely to have access to the very technology that is fuelling economic growth for other parts of the population. However, other studies show that this gap is changing because of the efforts of private companies and philanthropists in donating computers and sponsoring remote Internet services. These problems should be seriously treated and relevant research should be organised. The results of this studies would be made publicly available.

Learning from the private sector

The private sector clearly has led the way in using the Internet and other IT advances to break down communication barriers, slash procurement costs, streamline processes, boost productivity, and re-shape expectations for business-to-business transactions. The government can benefit substantially by adapting the lessons and harnessing the expertise of the private, non-profit, and academic sectors to advance the cause of e-Government. Reciprocally, substantial incentives exist for organisations in each of these sectors to bring these e-Government concepts to reality, given the associated economic opportunities, research needs, reduced cost of government interactions, and prospects for enhancing government services. Private companies have been highly successful in using the Internet to re-design how they do business. As a result, they have slashed costs, improved production, and created new markets and better services. The federal government can learn from the private sector, to apply the lessons of private businesses to improving government on-line services:

Improve citizen access

Government officials can use web sites to hold on-line meetings, press conferences, case studies and on-line advisory services.

Enhanced search capability

With the ever-increasing demand for information to be posted on the Internet, users can see that private institutions web sites are better arranged then the government web sides. Even when the desired information is present,

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[9] Similar "blue pages" uses Federal Government for American farmers.

people searching the government web site may not find it easily because of how the information is arranged. The government should take measures to improve the "searchability" of its on-line data[10].

Improved organisation of Government information

All ministries and state agencies already have some degree of presence on the Internet, in the form of web sites. In their current state, these sites serve as individual and specific "portals" to provide citizens with access to a vast array of public information. Some experts believe that the public would be better served if these efforts *were better co-ordinated*.

Private co-operating companies

The Ministry owns a vast amount of information (in the form of reports, databases, and other records) that could be much more useful to farmers, entrepreneurs and citizens producing and living in rural areas if it were packaged differently or organised more efficiently. Much of this information has never been placed in electronic form, or may be arranged in a format that is difficult to access and/or understand. Significant opportunities may exist to provide this information to interested users in user friendly formats. As envisioned here, public-private partnering could be used to identify information categories that would be the highest in citizen demand[11]. The benefit lies in repackage of the information and attracting new potential users on the market. Private organisation may be able to find other markets for the information, such as clients willing to pay for additional analysis and research based on the government data.

Privacy issues

In the future, it seems almost inevitable that farmers and citizens as well as and businesses will conduct more and more government interactions on-line. Despite the opportunities this future holds, however, the potential of the Internet for government services will not have fully explored until individuals feel confident about how the government protects their privacy in on-line interactions. Ministry agencies have diverse missions, and the information collected from a visitor to a given agency web site may legitimately be used very differently than it would be used at a different agency web site. A fundamental premise of e-Government privacy must be that the individual visitor knows (1) what type of personal information is collected, if any, (2) when that information is collected, (3) how that information may legitimately be used. This allows the citizen to make an informed decision about whether or not to reveal personal information as part of a given government transaction.

Subsidy of virtual education

Increasing the computer literacy both of the citizens and of the officials can help to ensure that, as citizen-to-government interactions become more automated, government employees are ready to actively participate in the transition. This increase in computer literacy can be achieved, in part, by ensuring that federal employees have easy access to computers, the Internet, and a broad range of computer training. The Internet has remarkable potential as a distance learning tool, and efforts have been underway for years, in the academic sector, to tap that potential[12]. Virtual education based on on-line communication can help in providing of education for adult employees by means of on-line certified computer courses at various skill levels, and to make that curriculum available at no charge to all government employees.

REFERENCES

Bent S., Kernaghan K., Marson B.D. (1999): Innovations and Good Practices in Single-Window Service. Canadian Centre for Management Development.

Castells M. (1996): The rise of the network society. Vol. 1, Malden, Massachusetts, USA, Oxford, UK: Backwell Publishers.

Electronic Signature; Law No 227/2000; 366/2001, 304/2001.

Federal Benchmarking Consortium (1997). Serving the American Public. Best Practices in One-Stop Customer Service. www.npr.gov/library/papers/benchmrk/onestp.hrinl. Washington, D.C., NPR.

Fountain J.E. et al. (1994): Customer Service Excellence. Using Information Technologies to Improve Service Delivery in Government. Strategic computing and Telecommunications in the Public Sector. Cambridge, MA: Harvard.

Frissen P. (1997): The virtual state. Postmodernisation, informatisation and public administration. Loader B.D. (ed.): The Governance of Cyberspace. London/New York, Routledge: 111–125.

Havlíček J. (1996): Integrating Management Information and Decision Support Systems in Economics in Transition. In: Sborník z konference Mathematical Methods in Economics, VŠE v Praze, Nová Huť: 124–128.

Havlíček J. (1996): Data Base Management. In: Proceedings of OECD Conference, Paris, OECD/GD(95), *38*: 514–519.

Havlíček J. (1996): Statement of Agricultural Statistics and Data Management in Czech Republic. In: Proceedings of OECD Conference, Paris, OECD/GD(95), *38*: 93–99.

Hron J., Tichá I. (1999): The Virtual Organization and Its Implications for Agricultural Businesses. Wydz. E i OGŽ, Szczecin: 105–120; ISBN 85-85847-27-8.

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[10] E.g. such as creating a government-wide resources index that helps users determine where information is located.

[11] "Value-Added Network"– is a company in USA that repackages information or performs similar services for commercial construction companies – it presets converting data in an electronic format and places it on-line, with little or no charge to the government agency.

[12] A significant is the "Learning Anytime Anywhere" (programmes LAAP), administered by the universities, which increase the quality and improve the focus of on-line university programs.

Intergovernmental Advisory Board (1998). Foundations for Successful Intergovernmental Management. Federal State, and Local Government Experiences. Washington, D.C.

Lenk K. (1997): The challenge of cyberspatial forms of human interaction to territorial governance and policing. Loader B.D. (ed.): The Governance of Cyberspace. London/New York, Routledge: 126–135.

Lips M., Frissen P. (1997): Wiring Government. Integrated public service delivery through ICT. ITeR Nr. 8. Alphen aan den Rijn/Diegem, Samson BedrijfsInformatie bv: 67–164.

Naschold F. (1996): New Frontiers in Public Sector Management. Trends and Issues in State and Loca! Government in Europe. Berlin, New York, Walter de Gruyter.

National Census 1999 (2000). Czech National Statistical Office, Prague.

OECD (2001): Engaging Citizens in Policy-making: Information, Consultation and Public Participation. PUMA Policy Brief No. 10;
http://www.oecd.org/pdf/M00007000/M00007815.pdf

Office of Intergovernmental Solutions (1999): Integrated Service Delivery: Governments Using Technology to Serve the Citizen International, Federal, State, and Local Government Experiences. Washington, D.C., GSA.

Per cent of all (2001). Statistical Annual, Census 2001.

Prisma (2002): Pan-European changes and trends in service delivery, deliverable D2.2 of Prisma, a research action supported by the Information Society Technologies Programme of the European Union, 2000–2003.

Prisma (2002a): Pan-European best practice in service delivery, deliverable D3.2 of Prisma, a research action supported by the Information Society Technologies Programme of the European Union, 2000–2003.

Seidle F.L. (1995): Rethinking the delivery of public services to citizens. Montreal, Institute for Research on Public Policy (IRPP).

Sofres Factum – Bureau for Public Opinion (2001).

Taylor J. et al. (1996): Innovation in Public Service Delivery. Information and Communication Technologies, hrsg. von William H. Button. Oxford, Oxford University Press: 265–268.

Tichá I. (1997): Koncept učící se organizace a informační technologie. In: Současný management – sborník, VŠB-TU Ostrava: 207–210; ISBN 80-7078-454-7.

Tichá I. (1997a): Virtuální organizace a její aplikace. In: MVD´97 Nitra, VŠP Nitra, 4 s.

Tichá I. (1997b): Virtuální organizace a možnosti jejího využití. Zemědělská ekonomika, ÚZPI, Praha; ISSN 0139-570X.

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