

## Table of Contents

### Introduction

Welcome to the 2005 ISSS/LORIS/V4DIS Conference.....	3
--	---

### Programme

Programme of the ISSS/LORIS/V4DIS 2005 Conference .....	5
---	---

### Information

Congress Centre Aldis .....	12
Committee of the LORIS/V4DIS 2005.....	15

### Conference Papers

ICT Strategy in the City of Vienna..... <i>Ingrid Götzl, City of Vienna</i>	16
EurActiv.cz–Internert Gateway for Europe .....	19
<i>Tereza Hořejšová, Editor-in-chief, EurActiv.cz</i>	
KEŠKULT–Comprehensive electronic statistics about culture .....	20
<i>Ján Jenča, Project Coordinator, ISOMI, a. s., Bratislava, Slovakia</i>	
eVillage: demonstrating the exploitation of public sector services on an open source platform.....	23
<i>Ms. Tünde Kállai, Hungarica Sprl.–Brussels/Budapest, Gábor Szentiványi, Hungarian Linux Industrial Association</i>	
CALIMERA Project .....	25
<i>Šárka Kašpárková, Project Coordinator, Czech Republic</i>	
Trans-European eGovernment–how to exploit the benefit.....	29
<i>Achim Klabunde, eTen Project Officer, DG Information Society, European Commission</i>	
Blind Friendly in Slovakia.....	31
<i>Branislav Mamojka, Slovak Blind and Partially Sighted Union</i>	
Civil Servants Back to the Classroom .....	33
<i>Katarína Mandíková, Ministry of Transport, Post and Telecommunications of the Slovak Republic</i>	
INSPIRE and eGovernment.....	40
<i>Eva Pauknerova, European Commission Joint Research Centre, Institute for Environment and Sustainability</i>	
Accessibility as one of the aspects of quality websites .....	41
<i>Radek Pavlíček, Hana Bubeníčková, United Organisation of the Blind and Weak-Sighted of the Czech Republic</i>	
Analysing Broadband Access for Rural Development, A-BARD project in the EU 6FP.....	45
<i>Radziulis Pawel, Senior Consultant, ITTI Ltd.</i>	
Concept of the development of libraries in the Czech Republic for 2004–2010 .....	46
<i>Vít Richter, National Library of the Czech Republic</i>	
An European Model of Charter of eRights.....	53
<i>José Ramón Rodríguez, CIO Barcelona City Council</i>	
PRELUDE Challenge .....	55
<i>Václav Sedláček, Rector of the West Moravian University Třebíč, o. p. s., Czech Republic</i>	
eCitizenhip for All project–LORIS, IT benchmarking for cities of the Czech Republic.....	59
<i>Jaroslav Šolc, Renata Tomanová, Prague City Council, Václav Řepa, School of Economics in Prague</i>	
Issues of reporting towards the EU at the level of regions: the Thüringen region.....	63
<i>Petr Stránský, Business Architect, Stransky Consulting</i>	

BusinessInfo and related services of the Economic Chamber of the Czech Republic .....	65
<i>Tomáš Vostřel, Manager of the regional part of the InMP project, Economic Chamber of the Czech Republic</i>	
City of Vienna—A modern approach to city management.....	68
<i>Petr Zavoral, Country Manager, SAS Institute Czech Republic</i>	
Bilbao & the II World Summit of Cities and Local Authorities on the Information Society .....	71
<i>José Ignacio Zudaire, Vice-Minister of Industry, Basque Government</i>	

## Documents

EuroCrest Contest 2005 .....	73
The Union of Towns of Slovakia.....	75
The Hungarian National Association of Local Authorities (TÖOSZ).....	76
The Association of Polish Cities—Związek Miast Polskich .....	78
The Union of Towns and Communities of the Czech Republic .....	81
Vysočina Regional Authority.....	83
Global Cities Dialogue.....	86
Culture 2000—Czech Cultural Contact Point.....	87
The National Broadband Access Policy Broadband Strategy of the Czech Republic .....	88
State Information and Communications Policy eCzech 2006.....	107
Triada Ltd.....	132

## Welcome to the 2005 ISSS/LORIS/V4DIS Conference

Ladies and gentlemen, dear foreign guests and dear colleagues,

Somewhat later in the year than customary, April instead of March, this year's eighth Internet in Public Administration and Self-Government/Local and Regional Information Society/Visegrád Group for Developing Information Society–ISSS/LORIS/V4DIS 2005 conference started in Prague and Hradec Králové. For all of you—representatives of public administrations and local governments from many countries, representatives of European bodies and networks, experts in information technologies, as well as representatives of exhibiting companies—the conference primarily means action-packed days crammed full of lectures, presentations and meetings, largely working. None the less, we have been looking forward to every new conference with increased fervour, curious about the new things it has in store, where public administration informisation will advance, what new trends, projects and plans will be presented at the conference, or how those already launched and implemented will be evaluated. Bearing witness to the truth of this statement is the steady year-on-year growth in the number of participants, conference partners and lecturers. Last year it climbed to two thousand and all the signs are that it is similar this year too.

Last year, concurrently with the LORIS international conference, which extended the conference programme to take on board European views and experience, the Visegrád Group for Developing Information Society conference, supported by the International Visegrád Fund, took place for the first time. Proof of its success is the fact that the International Visegrád Fund is supporting the DIS-V4: The Role of Municipalities and Regions in the Process of Development of eGovernment Services, eCulture and other Web Applications for Citizens in V4 Countries project this year as well. Hence, it is possible to hold the second year of this Euro-regional conference of Visegrád 4 countries too. Its objective is to create the necessary framework for mutual communication, experience exchange and prospective cooperation at the level of specialised expert teams, associations of municipalities and regions, self-governments of towns and regions, as well as governments and parliaments of Poland, Hungary, Slovakia and the Czech Republic.

A momentous output of last year's conference was the adoption of the eV4/LORIS Declaration.

This year, the conference's international section has been prolonged by two days owing, among other things, to the Town Twinning project managed by the Vysočina Region. Accordingly, in collaboration with Prague City Council, the Vysočina Region and the association Český zavináč, the meeting of the Global Cities Dialogue and the session of the GCD Steering Committee and Sherpa's Meeting took place in Prague starting on Friday, April 1, 2005.

It thus comes as no surprise that our conference is considered one of the largest and most significant events pertaining to information society in Central, Eastern and South-Eastern Europe, and that it is duly acknowledged by the European Commission. This year, for the first time, the conference is held at a time when the Czech Republic—together with the other Visegrád 4 countries—is a fully fledged member of the European Union. Consequently, it can be presumed that its importance for the future will grow even further and that other acceding and candidate countries in particular will regard it as the closest platform they have for exchange of experience from eGovernment development.

As is customary at the conference, you have received this collection of documents and conference papers. Naturally, it could not possibly cover all the issues that will be discussed at the conference. It does, however, provide a general overview of particular topics the ISSS 2005 conference will deal with.

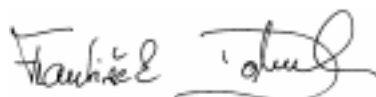
The programme will, as always, encompass all the major themes: eGovernment at the European and Euro-regional level, comparison of national broadband strategies, the optimal form of implementing ICT in public administration, as well as development of electronic services for citizens, eCulture and eLibrary issues etc. A number of papers will deal with other key areas too; among them, European networks, portals, communication infrastructure of public administration information systems, geographic information systems, data sharing within various systems, and security issues. Atten-

tion will undoubtedly also be drawn to financing of support for and development of information society from European resources and funds, and the possibilities of using information systems in environmental protection.

We believe that the ISSS/LORIS/V4DIS 2005 conference and its discussion forums, workshops and other events will be a fertile source of inspiration and new knowledge for you.



Tomáš Renčín  
Conference Executive Director



František Dohnal  
Conference Programme Director  
1<sup>st</sup> Vice-President of the Vysočina Region

## Programme of the ISSS/LORIS/V4DIS 2005 conference

The blocks marked grey will be interpreted CZ↔ENG.

### Monday, April 4

<b>Main hall</b>	10.40–12.00	<b>Conference opening, opening speeches</b> <i>Vladimír Špidla, Commissioner for Employment, Social Affairs and Equal Opportunities</i> <i>Vladimír Mlynář, Minister of Informatics of the CR</i> <i>František Bublan, Minister of the Interior of the CR</i> <i>Libor Ambrozek, Minister of the Environment of the CR</i> <i>Jiří Paroubek, Minister of Regional Development of the CR</i> <i>William J. Cabaniss, US Ambassador to the Czech Republic</i> <i>Beata Brestenská, National Council of the Slovak Republic</i> <i>Evžen Tošenovský, President of the Moravia-Silesia Region</i> <i>Otakar Divíšek, Lord Mayor of Hradec Králové</i> <i>František Dohnal, 1<sup>st</sup> Deputy President of the Vysočina Region</i> <i>Tomáš Renčín, Conference Executive Director</i>
<b>Small hall</b>	9.00–10.30	<b>Electronic registries</b> eRegistries, experience after three months of operation, <i>Jan Hobza, Ministry of Informatics of the CR, 20'</i> Spam and legal regulation of information society services, <i>Martin Plíšek, Ministry of Informatics of the CR, 15'</i> Electronic document management in public administration, <i>Bedřich Chaloupka, Hewlett-Packard, 15'</i> Document storage in electronic form, <i>Oskar Macek, Archive Administration, Ministry of the Interior of the CR, 15'</i> Implementation of an electronic registry, practical experience, <i>Tomáš Lechner, Triada, Irena Rálišová, Town of Sezemice, 10'</i> Panel discussion, 15'
	12.30–13.20	Trends in IT usage to increase the effectiveness and quality of public administration services, <i>Milan Prypoň, MBA, Hewlett-Packard, 20'</i> <b>Lecture of the general partner</b> Acceptance of payment cards for towns and municipalities, <i>Milan Kutnar, Česká spořitelna, a. s., 30'</i>
	13.30–15.00	<b>Block of lectures by main partners I</b> Monitoring of projects carried out within the framework of utilising EU structural funds, <i>Boris Štraut, IBM, 15'</i> How does Microsoft aid public administration of the Czech Republic?, <i>Jan Toman, Microsoft, 30'</i> Approach to tackling IT security, <i>František Nemočovský, Unisys, 15'</i> Information systems for communication between citizens and authorities, <i>Ladislav Kollar, Siemens Business Services, 30'</i>
	15.15–16.45	<b>Block of lectures by main partners II</b> Public administration authority in the role of organisation of services for citizens, <i>Michal Petryl, SAP ČR, 30'</i> Unisys's vision for Czech crisis solution, <i>Gábor Petróczy-Farkas, Richard Nonfried, Unisys, 15'</i> Integration of information in civil service and information sharing within the EU, <i>Pavel Hrdlička, IBM, 15'</i> Centre of communication with citizens, <i>Michal Zbořil, Oracle, 30'</i>
	17.00–18.10	<b>Block of lectures by main partners III</b> Public administration portal, status of the project and services provided by Czech Telecom, <i>Pavel Paták, Czech Telecom, 15'</i> Special software and Open Source software, <i>Aleš Kučera, Novell-Praha, s. r. o., 20'</i> Architecture of public administration's information and communication infrastructure, <i>Miroslav Nováček, ANECT, 20'</i> Electronic tolls, <i>Filip Linhart, Czech Telecom, 15'</i>
<b>Lecture hall</b>	9.00–10.30	<b>Openness in public administration</b> Amendment to the Act on free access to information, <i>David Kotris, Ministry of Informatics, 15'</i> Transparency in Public Administration, <i>William J. Cabaniss, US Ambassador to the Czech Republic, 5'</i> Comprehensiveness of municipalities and regions' websites, <i>Oldřich Kužilek, 15'</i> Privacy, identity, internet and Czech eGovernment, <i>Petr Koubský, Softwarové noviny, 15'</i> How are resolutions approached in Hradec Králové, <i>Karel Havlíček, Hradec Králové City Council, 10'</i> Prague 6—A decent authority. New electronic services, <i>Tomáš Chalupa, Prague 6, 10'</i> New regulation of personal data protection in the Czech Republic, <i>Zbyněk Loebel, Central European Advisory Group, 10'</i> Software piracy, <i>Luděk Švamberk, Ministry of the Interior of the CR, 10'</i>
	12.20–13.00	Press conference of the Ministry of Informatics of the CR, <i>Vladimír Mlynář, Minister of Informatics of the CR, 40'</i>

- Lecture hall** 13.30–15.00 **Modern public administration management**  
 Modern public administration management from the viewpoint of a secretary, *Radek Baloun, Hradec Králové City Council, 10'*  
 Supervising the usage of EU funds–benefits of IT systems, *Petr Stránský, Stransky Consulting, 20'*  
 Measurement and management of public administration authorities' performance and IT systems, *Petr Zavoral, SAS Institute ČR, 20'*  
 Active usage of public administration statistical data, *Petr Šlajchrt, SAS Institute ČR, 10'*  
 Key role of IT systems in support for employment, *Petr Šlajchrt, SAS Institute ČR, 20'*  
 Regional information portals–experience from the EU, *Petr Stránský, Stransky Consulting, 10'*
- 15.15–16.45 **Education and e-learning**  
 Errors when preparing and carrying out distance learning of adults, *Jana Prádlová, IBM, 15'*  
 E-learning as a tool fostering employment and enterprise growth, *Andrea Barešová, Hewlett-Packard, 15'*  
 Information system for distance learning management with the Class Server, *Jiří Laciga, CCA Group, 30'*  
 Do you need to effectively educate employees? We know how to do it. SAP ČR and Oxygen Solutions, *Milan Štolba, Oxygen Solutions, 30'*
- 17.00–18.10 **Information literacy**  
 Infovek, *Beáta Brestenská, National Council of the Slovak Republic, 20'*  
 State information policy in education in 2005, *Radek Maca, Antonín Mucha, MŠMT, 15'*  
 Civil servants back to the classroom–ECDL, *Katarína Mandíková, Ministry of Transport, Post and Telecommunications of the SR, 10'*  
 Inspiration and competition in the TopRegion.cz databank, *Petra Jedličková, National Educational Fund, 15'*  
 Solon: electronic publication for public administration workers and library visitors, *Barbora Kubásková, Triada, 10'*
- 18.30–19.30 CACIO, Miroslav Marčan, 60' (closed discussion)
- Elisabeth hall** 9.00–10.30 **Information about the environment in public administration LORIS/V4DIS**  
 Introduction to the issue, *Libor Ambrozek, Minister of the Environment of the CR, 15'*  
 Legislative framework of the issue, services for public administration, *Jiří Hradec, ČEU, 15'*  
 Environmental Integrated System in Slovakia, *Benko, Slovak Environment Agency, 10'*  
 Success stories:  
 Use of GIS for protection of mineral resources, *Jaroslav Česnek, Ministry of the Environment, 10'*  
 History of the SESEZ database, *Jan Gruntorád, 10'*  
 Internet and nature conservation, *Jan Zohorna, Agency for Nature Conservation and Landscape Protection of the CR, 10'*  
 Landscape atlas of the Sloval Republic on-line, *Koška, Slovak Environment Agency, 10'*
- 12.20–13.20 Effective IT–utopia or reality? Simplified and secure architecture, consolidated data, *Petr Paukner, Oracle, 30'*  
 Implementation of standards in integrating applications and cryptographic chip cards, *Ivo Rosol, OKsystem, 30'*
- 13.30–15.00 **Security of information systems I**  
 National strategies of information security, *Goll, Ministry of Informatics, 15'*  
 Security in practice–implementation in the WAN ÚZSVM network, *Tomáš Kantůrek, ANECT, 30'*  
 Not all firewalls are the same, *Ladislav Šolc, Microsoft, 15'*  
 EasyXchange–consolidation of mail servers, *Milan Mydlář, Siemens Business Services, 15'*  
 Symantec Brightmail Antispam, *Jaroslav Techl, Abakus, 15'*
- 15.15–16.50 **Security of information systems II**  
 Risks of attack on web applications, *Stanislav Biža, IBM, 15'*  
 Management of digital ID and digital rights, *Jana Dvořáková, Novell, 20'*  
 Chip cards in health and social insurance, *Petr Adámek, Siemens Business Services, 15'*  
 The one and only solution–from passwords to chip cards!, *Pavel Hejl, T-Soft, 30'*  
 Mount10 backup, *Jaroslav Techl, Abakus, 15'*
- 17.00–18.20 **Role of IT technologies in crisis situations**  
 Protext–an effective route to the media, civil service and the public, *Přemysl Cenkl, ČTK, 15'*  
 Portal for crisis management, *Vilém Adamec, Michal Valík, MV–General Directorate of HZS ČR, 10'*  
 TCVT 112 emergency call centres, *Zbyněk Škopán, Czech Telecom, 20'*  
 iMunis SmiS service, *Jiří Hudeček, Lety Municipality, Tomáš Lechner, Triada, 10'*  
 Integrated traffic information system for the CR, *Jaroslav Zvára, Ministry of Transport, Ministry of the Interior, Ministry of Informatics, State Transport Directorate of the CR, 15'*
- 19.00–19.50 Golden Crest, meeting of finalists of the traditional competition, *Jan Savický*

<b>Meeting hall</b>	9.00–10.30	<p><b>LORIS/V4DIS Conference—opening</b></p> <p>Introductory word, <i>Vladimír Špidla, Commissioner for Employment, Social Affairs and Equal Opportunities, František Dohnal, 1<sup>st</sup> Deputy Administrator of the Vysočina Region, Beáta Brestenská, Deputy, National Council of the SR, Reně Kubásek Deputy Director of the International Visegrád Fund, 30'</i></p> <p>CEMR Policy Group on Information Society and e-Government, <i>Angelika Poth-Moegele, Council of European Municipalities and Regions, 15'</i></p> <p>e-Policies of V4 countries:</p> <p>150 days in the role of the government's assignee for information society, <i>Miroslav Kukučka, Ministry of Transport, Post and Telecommunications of the SR, 15'</i></p> <p>Round table: e-policies of the V4 countries, <i>Dana Běrová, Ministry of Informatics of the CR, Miroslav Kukučka, Ministry of Transport, Post and Telecommunications of the SR, Nagyhazi Gyorgy, Prime Minister's Office, Hungary, Andrzej Janicki, Alfa-Omega Foundation, Poland, 30'</i></p>
	12.20–13.20	<p><b>Knowledge-Based Society Manifesto: What the Czech Republic Must Do to Succeed as a Highly Developed Country in the 21<sup>st</sup> Century Global Capitalism,</b></p> <p><i>Aleš Bartůněk, Miroslav Řihák, Vlastimil Palata, Jiří Devát, Tomáš Rutrle, Jan Přerovský, moderated by Ondřej Felix, Association for Information Society, 60'</i></p>
	13.30–15.00	<p><b>European Networks</b></p> <p>Global Cities Dialogue presentation, <i>Willi Lemke, City of Bremen, 15'</i></p> <p>Bilbao Summit, <i>Josu Ocariz, Basque Government, 15'</i></p> <p>TeleCities in the Future, <i>Albert Deistler, City of Cologne, 15'</i></p> <p>eRights Charter, <i>Jose Ramon Rodriguez, City of Barcelona, 15'</i></p> <p>PRELUDE Challenge—continuation of the initiative with the participation of newly acceded regions, <i>Václav Sedláček, West Moravian University Třebíč, o. p. s., 10'</i></p>
	15.15–16.45	<p><b>Financing IT projects from European Union funds</b></p> <p>Common regional operating programme (SROP)—Measure 2.2. ICT development in regions, <i>Zdeněk Vašák, Ministry of Regional Development, 15'</i></p> <p>EU programmes pertaining to information society, <i>Jan Prokšík, Ministry of Informatics, 20'</i></p> <p>Trans-European e-services, <i>Achim Klabunde, European Commission, 15'</i></p> <p>Support for EUSF projects in public administration, <i>Jan Knytl, Microsoft, 20'</i></p> <p>Issues of reporting towards the EU at the level of regions: the Thüringen region, <i>Petr Stránský, Stransky Consulting, 10'</i></p> <p>Subsidy management, <i>Petr Štěpánek, Economia OnLine, 5'</i></p>
	17.00–18.20	<p><b>eStrategies and benchmarking of European cities</b></p> <p>eCitizenship for all 2004: EU, <i>Van den Berg, Drewes, Deloitte, 10'</i></p> <p>eCitizenship/LORIS in the Czech Republic (+V4), <i>Jaroslav Šolc, Renáta Tomanová, MHMP, 10'</i></p> <p>Vienna, <i>Ingrid Götzl, City of Vienna, 15'</i></p> <p>Gdansk, <i>Piotr Murawski, City of Gdansk, 15'</i></p> <p>Prague, <i>Jaroslav Šolc, Ivan Seyček, Rudolf Abraham, City of Prague, 10'</i></p> <p>Round table, <i>Deistler, Rodriguez, 20'</i></p>
<b>Labe hall</b>	9.00–10.30	<p><b>Informisation of local government I</b></p> <p>Joint projects of the Association of Regions of the CR and the Ministry of the Interior of the CR, <i>Václav Koudele, Association of Regions of the CR, Tomáš Holenda, Ministry of the Interior, 20'</i></p> <p>Creation of document regulations, <i>Petr Kolačkovský, MeÚ Slaný, Tomáš Lechner, Triada, 10'</i></p> <p>FENIX, <i>Pavel Kučera, PVT, 30'</i></p> <p>City of Vienna: A modern approach to city management, <i>Petr Zavoral, SAS, 20'</i></p>
	12.20–13.20	<p>iMunis—portal services of municipal information systems, <i>Jan Brychta, Triada, 15'</i></p> <p>Satellite technologies for toll collection—a unique opportunity for telematic services development, <i>Michal Hátle, T-Systems Pragonet, 45'</i></p>
	13.30–15.00	<p><b>Informisation of local government II</b></p> <p>Discussion: Informisation of self-governments, <i>Evžen Tošenovský, Association of Regions of the CR, Josef Postránecký, Ministry of the Interior of the CR, Dana Běrová, Ministry of Informatics of the CR, 30'</i></p> <p>Opportunities and risks of implementing integrated centres of communication with citizens, <i>Josef Beneš, LogicaCMG, 30'</i></p> <p>Document and archive service and a credible archive, <i>Petr Havlíček, Miroslav Skokan, PVT, 30'</i></p>
	15.15–16.45	<p><b>Informisation of local government III</b></p> <p>Examples of information and education portal solutions, <i>Tomáš Kutěj, Microsoft, 15'</i></p> <p>Possibilities of using mobile phone communication in the civil service and self-government, <i>Jan Křečan, T-Mobile, 30'</i></p> <p>RedDot Solutions for the civil service and self-government, <i>Petr Svoboda, Oxygen Solutions, 30'</i></p> <p>Electronic processing of input presentments, <i>Pavel Vosáhlo, Roman Antoň, Siemens Business Services, 15'</i></p>

<b>Labe hall</b>	17.00–18.20	<b>Informisation of local government IV</b> Regional and municipal information system (RAMIS), <i>Petra Škeříková, PVT, 30'</i> Business Intelligence and its tools in public administration, <i>Petr Zeman, Kočka, Tomáš Kočka, Adastra, 30'</i> IISSDE: Integrated information system of administrative and transport-administrative records–under new conditions, <i>Jiří Malátek, Ministry of the Interior, 10'</i> Analysis of public needs from the viewpoint of IISSDE–internet as an important alternative, but not for everyone...., <i>Pavel Šimoník, STEM/MARK, 10'</i>
<b>Visegrád lounge</b>	9.00–10.20	Meetings of secretaries, <i>20' (closed session)</i>
	12.20–13.20	Round table: “What will our legacy be...”, Long-time storing of documents, <i>Ministry of the Interior, 60'</i>
	13.30–15.00	<b>Portal solutions</b> Business Info and related services of the Economic Chamber of the Czech Republic, <i>Tomáš Vostřel, Economic Chamber of the CR, 20'</i> Regional portal solutions, <i>Petr Pavlinec, Václav Koudele, Association of Regions of the CR, 10'</i> Portal of the integral technical map of the Zlín Region, <i>Miroslava Knotková, Ivo Svrášek, Zlín Region, 10'</i> The InMP project as a contact place for entrepreneurs, <i>Economic Chamber of the Czech Republic, 20'</i> Portal of the Capital City of Prague, the beginning of a new stage, <i>Ivan Seyčák, Jitka Pankráčová, Miroslav Váňa, Prague City Council, 20'</i> Portal of regional planning, <i>Zdenka Hladišová, Hana Šimková, Institute of Regional Development, 10'</i>
	15.15–16.40	<b>GIS issues</b> Introduction to INSPIRE, <i>Jiří Hradec, Czech Environment Institute, 10'</i> INSPIRE and eGov, <i>Eva Pauknerová, Institute for Environment &amp; Sustainability, Joint Research Centre–European Commission, 15'</i> INSPIRE and metadata for public administration, <i>Bronislava Horáková, Petr Kubíček, PhD., CAGI, 15'</i> INSPIRE in the Slovak Republic, <i>Martin Tuchyňa, Ministry of Environment of the Slovak Republic, 15'</i> Package of map services (not only) for Hradec Králové citizens, <i>Marek Lesák, T-Mapy, Hradec Králové City Council, 10'</i> Nemoforum as a source of legislative concepts pertaining to territorial information, <i>Růžena Zimová, Nemoforum, 10'</i> Data services for database and geographic applications at Prague City Council, <i>Jiří Černý, Zdeněk Jánský, Prague City Council, 10'</i>
	17.00–18.00	Meeting of KISMO and regions with Deputies of the Chamber of Deputies of the Parliament of the Czech Republic, <i>60'</i>
	19.15–20.00	Meeting of secretaries, <i>45'</i>
<b>Lounge</b>	11.30–12.15	Intelligent XML forms in practice, <i>Pavel Nemrava, Software 602, 45'</i>
	12.30–13.15	Bentley Geospatial solution for public administration and self-government, Technical Documentation Management and GIS, <i>Ondřej Patočka, Bentley Systems, 45'</i>
	13.30–14.00	Press conference of Commissioner Spidla, <i>30'</i>
	14.30–15.00	Press conference of the Minister of the Interior of the Czech Republic, <i>30'</i>
	15.20–15.50	FES–usage of mobile telephones within the framework of the Integrated Rescue System, <i>Ondřej Janovský, Cleverance, 30'</i>
	16.00–17.00	Coordination of ICT usage in ministries of the interior of V4 countries, <i>Bureš, Ministry of the Interior of the CR, 60'</i>
	18.50–19.40	Geoapplication of the Year, <i>50'</i>
<b>VIP room</b>	19.00–20.00	Association for Information Society, Goblet of Wine, <i>60'</i>
<b>VIP 1 lounge</b>	14.10–15.10	Meeting of Deputies of the Chamber of Deputies of the Parliament of the Czech Republic and Deputies of the National Council of the Slovak Republic, <i>60'</i>
<b>VIP 2 lounge</b>	15.00–16.30	Meeting about projects of the Association of Regions of the Czech Republic, <i>Petr Pavlinec, Association of Regions of the CR, 90'</i>
<b>Aldis Congress Centre</b>	20.00–02.00	<b>Evening social programme</b> Announcement of the results of the Golden Crest competition Announcement of the results of the EuroCrest competition Announcement of the Prize of the Minister of Informatics Announcement of the Geoapplication of the Year Announcement of the results of the Biblioweb competition Announcement of the results of the Český zavináč (@ Czech) competition Social programme, party

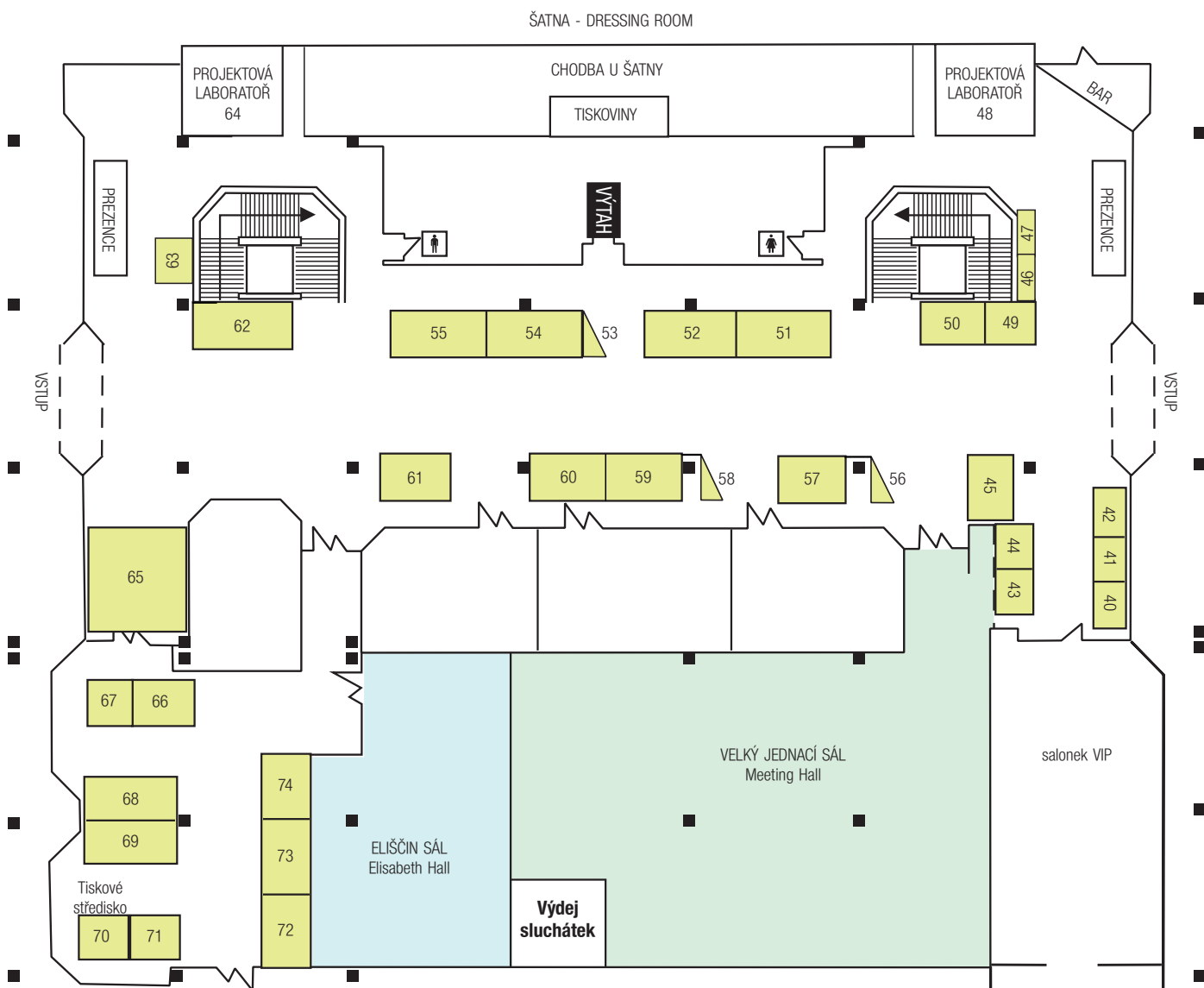


**Tuesday, April 5**

- Small hall** 9.00–10.30 **Public administration portal**  
 New applications for the Public Administration Portal,  
*Dana Běrová, Ondřej Větrovský, Ministry of Informatics of the CR, 15'*  
 Novelties in the information part of the Public Administration Portal, *Břetislav Moc, IBM, 15'*  
 Applied usage of the transaction part of the Public Administration Portal,  
*Iva Zelenková, Robert Hernady, Microsoft, 20'*  
 Public Administration Portal, a system tool in the intentions of the Czech Social  
 Security Administration, *Vladimír Fanta, Czech Social Security Administration, 10'*  
 Cooperation between the Public Administration Portal project and ePUSA,  
 webservices, *Václav Koudele, Association of Regions of the CR, 15'*  
 New Integrated Information Portal of the Ministry of Labour and Social Affairs,  
*Petr Hortlík, Ministry of Labour and Social Affairs of the CR, 15'*
- 10.45–12.15 **Electronic communications**  
 Digitalisation, *Vladimír Mlynář, Minister of Informatics of the CR, 30'*  
 Broadband strategy, *Vladimír Mlynář, Minister of Informatics of the CR, 30'*  
 Answers to questions, *Vladimír Mlynář, Minister of Informatics of the CR, 30'*
- 12.30–13.45 **Communication infrastructure of public administration information systems**  
 Development of the communication infrastructure of public administration information systems, *Lubomír Moravčík, Ministry of Informatics of the CR, 15'*  
 Project of the Moravia-Silesia Region, *Rostislav Babarík, Cyril Čapka, Ministry of Informatics of the CR, 10'*  
 Project of reference interface implementation, *Jitka Krčilová, Ministry of Informatics of the CR, 20'*  
 Methodological activity of the Ministry of Informatics following Amendment 365,  
*Jan Hobza, Ministry of Informatics of the CR, 30'*
- GIS Arena** 9.00–10.30 **GIS in public administration I**  
**Main hall**  
 GIS projects of regions, *Petr Pavlínek, Association of Regions of the CR, 15'*  
 Map services in the Czech Republic, *Josef Havaš, Intergraph ČR, 15'*  
 GIS for e-Government, *Radek Kuttelwascher, ARCDATA PRAHA, 15'*  
 GIS in towns and municipalities, *Zdeněk Hoffmann, Gepro, 15'*  
 Status of GIS building-up at the Institute of Geodesy, Cartography and Cadastre of the  
 Slovak Republic, *Miloslav Ofíkalný, Institute of Geodesy, Cartography and Cadastre of the Slovak Republic, 15'*  
 Geoapplication of the Year, *15'*
- 10.45–12.15 **Integrated environmental information system**  
 Integrated environmental information system and information agency, services for  
 public administration and citizens, *Jiří Hradec, Czech Environment Institute, 10'*  
 Atlas of the Czech Republic's landscape, *Peter Mackovčín, Ministry of the Environment, 10'*  
 Map services, Environmental indicators, *Kamila Vokřilová, Ministry of the Environment, 10'*  
 Map services of the Public Administration Portal, *Štěpán Žežula, Ministry of Informatics, 10'*  
 System of recording contaminated places–environmental burdens,  
*Václav Kolář, T. G. Masaryk Water Research Institute, 10'*  
 Environmental protection information system,  
*Roman Bukáček, GIS Laboratory of the Administration of Protected Landscape Areas of the CR, 10'*  
 Integrated pollution register, *Jan Prášek, Czech Environment Institute, 10'*  
 Geological information system, *Zuzana Krejčí, Czech Geological Service, 10'*  
 Waste management information system–development and current status,  
*Dagmar Sirotková, T. G. Masaryk Water Research Institute, 10'*
- 12.30–13.40 **GIS in public administration II**  
 Cadastre data enhance effective functioning of public administration,  
*Oldřich Pašek, Czech Geodesy and Cadastre Office, 10'*  
 The Geodesy Office fulfils the programme of the National Geoinformation  
 Infrastructure, *Jiří Černohorský, Geodesy Office, 10'*  
 Territorial identification and addresses from the viewpoint of the Ministry of Labour  
 and Social Affairs, *Karel Lux, Ministry of Labour and Social Affairs of the CR, 10'*  
 Round table: The issue of addresses in the Czech Republic,  
*ČÚZK, ČSÚ, MPSV, CEDA, CAGI, MIČR, 40'*
- Lecture hall** 9.00–10.30 **Projects enhancing information society development I**  
 Central healthcare applications of the company ICZ, *Miloš Poláček, ICZ, 30'*  
 Microsoft solutions in health service and public administration authorities in the Czech  
 Republic,  
*Microsoft and partners–Petr Gandalovič, Lord Mayor of the City of Usti nad Labem, CDL, NESS, WebCom, 45'*  
 Novell and Linux–Operating systems from desktop to server, *Luděk Šafář, Novell, 15'*

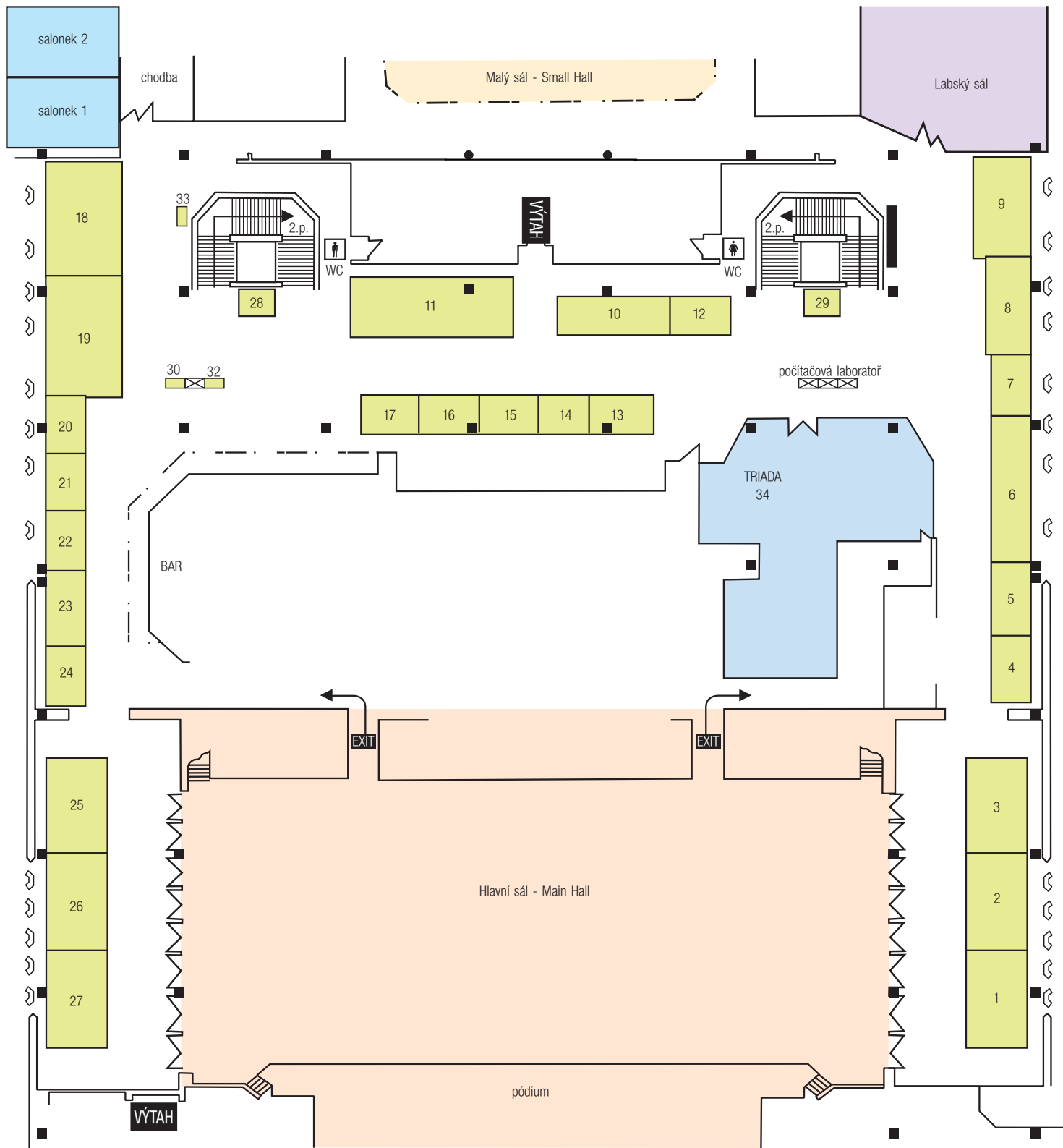
- Lecture hall** 10.45–12.20 **Projects enhancing information society development II**  
 SAP solution for public administration, *Jan Renc, SAP, 30'*  
 Web publication systems, *Tomáš Novák, Macron Software, 15'*  
 Research into information literacy, *Jan Tuček, STEM/MARK, Ministry of Informatics of the CR, 10'*  
 Trends towards information society—limits of electronic communication,  
*Jaroslav Svoboda, Ministry of the Interior of the CR, Pavel Šimoník, STEM/MARK, 10'*  
 Electronic marketplace for public administration, *Dana Novotná, Ministry of Informatics, 10'*  
 Electronic auction project, *Karel Tůma, Economic Chamber of the CR, 10'*
- Meeting hall** 9.00–10.30 **Communication infrastructure I**  
 Wow! Why optical Wireless?, *Petr Lacina, UNIS COMPUTERS, 15'*  
 New trends in communications for public administration, *Jan Kodad, Siemens, 15'*  
 GovNet and presentation of possible interconnection with local providers,  
*Pavel Pěč, Czech Telecom, 15'*  
 Central register of entrepreneurs—trading register, *Jana Kratinová, ICZ, 15'*  
 Trading register, *Jan Pokorný, Ministry of Informatics of the CR, 15'*  
 Experiences from a pilot test of the Trading Register, *Prague City Hall, 15'*
- 10.45–12.00 **Communication infrastructure II**  
 Use of web services in communication with public administration central registers,  
*Jan Peremský, Komix, 30'*  
 Wireless communications for sound and data, *Jan Kodad, Siemens, 15'*  
 Projects of network infrastructure of regions (Ostrava, Pilsen, Pardubice, Jihlava),  
*Petr Pavlinec, Association of Regions of the CR, 30'*
- Elisabeth hall** 9.00–10.30 **Information systems in the tourist industry**  
 IT in the tourist industry,  
*Ivana Hanačíková, Igor Hartmann, Ministry of Regional Development, 10'*  
 CzechTourism, web presentation, *Július Hájek, Czech Tourist Trade Central Office, 10'*  
 V4 portal in advertising destinations,  
*Július Hájek, Alena Vlachová, Czech Tourist Trade Central Office, Bársony, Hungary, 10'*  
 Issues related to the origination of a regional tourism portal [www.region-vysocina.cz](http://www.region-vysocina.cz),  
*Jitka Matyášovská, Ivana Mahelová, Vysočina Region, 10'*  
 Destination management, *Lubor Mrázek, Český Krumlov, Jitka Fatková, Czech Tourist Trade Central Office, 10'*  
 Importance of internet advertising of tourism regions,  
*Ilona Maierová, Aleš Hozdecký, Turnov Municipal Office, Český ráj association, 10'*  
 Increasing the quality of tourist trade IS in regions, towns and municipalities,  
*Josef Zelenka, Hradec Králové University, 10'*  
 Piemonte: support for tourism development as a key to regional development,  
*Petr Šlajchrt, SAS Institute CR, 10'*
- 10.45–12.10 **Best practices of towns and municipalities**  
 Round table of winners: Golden Crest, EuroCrest, 30'  
 Best practice special prizes of the Ministry of Regional Development within the  
 Golden Crest competition, *Igor Hartmann, 10'*  
 eGovernment and Slovak self-governments, *Miroslav Drobný, Union of Towns of Slovakia, 15'*  
 Accessibility as one of the aspects of a quality website,  
*Radek Pavlíček, United Organisation of the Blind and Weak-Sighted, 15'*  
 Analysis and state of IT facilities of self-governments of the Association of Towns and  
 Communities of Slovakia and a development plan, *Jan Jenča, ISOMI, 15'*
- 12.30–13.35 **eLibraries and eCulture**  
 Calimera Project, Cultural Applications: Local Institutions Mediating Electronic  
 Resource Access, *Šárka Kašpárková, Kroměříž Region Library, 10'*  
 Conception of libraries' development for 2004–2010, *Vít Richter, National Library of the CR, 15'*  
 Programme of libraries' internetisation, *Martin Boka, Ministry of Informatics, 15'*  
 Culture 2000—community programme for culture, *Romana Křížová, Cross Czech, 15'*  
 Public libraries' websites' links to websites of municipalities and towns,  
*Aleš Brožek, State Scientific Library in Ústí na Labem, 10'*
- Labe hall** 9.00–10.10 **European projects**  
 A-BARD, *Pawel Radzilius, ITTI, 15'*  
 Open source in e-Administration—eVillage, *Tunde Kallai, European Project Coordination Office,  
 Gabor Szentivanyi, Hungarian LINUX Industrial Association, 15'*  
 Software patent, *Jiri Zlatuska, Parliament of the Czech Republic, 20'*  
 Presentation of the EurActiv.cz portal, *Tereza Hořejšová, EurActiv.cz, 10'*  
 Discussion, 10'
- 10.20–11.50 Meeting of central authorities' webmasters (closed session),  
*František Špaček, Ministry of the Interior of the CR, Petr Polanský, Transport Research Centre, 90'*

<b>Visegrád lounge</b>	9.00–9.55	Meeting of representatives of editorial staff of municipal newsletters and their cooperation with websites, <i>Petra Krajínová, Antonín Eliáš, 55'</i>
	10.00–10.45	Intelligent XML forms in practice, <i>Pavel Nemrava, Software 602, 45'</i>
<b>Lounge</b>		Closed sessions



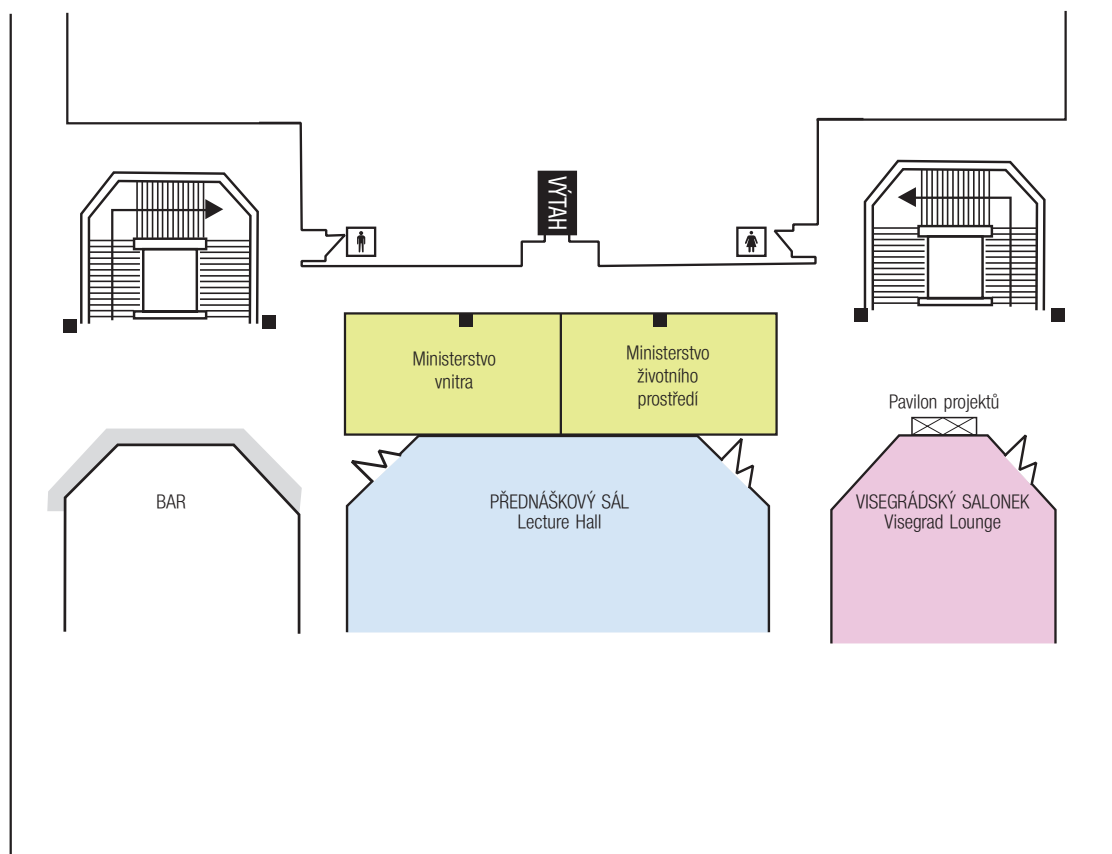
číslo	firma	číslo	firma
<b>Vystavující firmy</b>			
46	5P, s.r.o.	71	info.com s.r.o.
55	ASPI, a.s.	72	K-net Technical International Group, s.r.o.
54	B2B Centrum, a.s.	66	Macron, s.r.o.
59	CCA Group, a.s.	47	OKI SYSTEMS, s.r.o.
68	Česká pošta, s.p.	61	Olympus C&S, spol. s r.o.
41	Česká vydavatelská pro internet, s.r.o.	53	Oxygen Solutions, s.r.o.
51	EUROPEUM Praha a.s.	49	SAS Institute ČR, s.r.o.
43	FairNet Distribution, spol. s r.o.	58	SODAT SW spol. s r.o.
57	GEOMETRA Opava, spol.s r.o.	63	Solón – el. publikace
52	GEOVAP, spol.s r.o.	72	T-SOFT, s.r.o.
73	GOPAS a.s.	50	VERA a.s.
56	GORDIC spol.s r.o.	74	VERA, spol.s r.o.
44	HORN International, s.r.o.	40	Vogel Burda Communications s. r. o.
45	Hospodářská komora ČR	69	Zeměměřický úřad
67	Hospodářské noviny		
60	Hydrosoft Veleslavín, s.r.o.	65	INFO
42	IDG Czech, a.s.	48	Projektová laboratoř
		64	Projektová laboratoř
		70	Tiskové středisko





číslo stánku FIRMA	číslo stánku FIRMA	číslo stánku FIRMA
<b>Generální partner</b>	14 Corpus Solutions, a.s.	23 Novell – Praha s.r.o.
19 Česká spořitelna a.s.	17 Eurotel Praha, spol.s r.o.	21 OKSystem, spol. s r.o.
<b>Hlavní partneři</b>	13 EXPRIT, spol. s r.o.	28 Oracle Czech s.r.o.
1 MICROSOFT, s.r.o.	8 Geodis Brno, spol. s r.o.	29 Oracle Czech s.r.o.
3 IBM Česká Republika spol. s r.o.	12 GEPRO spol. s r.o.	16 Ortex, spol.s r.o.
25 UNISYS s.r.o.	22 GREDI s.r.o.	24 Ron Software, spol. s r.o.
<b>Ostatní</b>	33 Hewlett – Packard, s.r.o.	11 SAP ČR, spol. s r.o.
30 ADVICE.CZ s.r.o.	7 Hradec Králové	6 Software602, a.s.
20 Anect a.s.	2 ICZ a.s.	10 T-MAPY spol.s r.o.
5 ARCDATA Praha, s.r.o.	15 Intergraph ČR, spol. s r.o.	34 Triada spol. s r.o.
32 Atestační středisko RELSIE	22 KCT Data, s.r.o.	9 T-Systems PragoNet a.s.
4 AutoCont CZ, a.s.	27 Kraj Vysočina	
	18 Ministerstvo informatiky ČR	
	26 Ministerstvo pro místní rozvoj ČR	

## 2. patro – 3rd floor



## Committee of the LORIS/V4DIS 2005

**Executive Director**

Tomáš Renčín  
rencin@issss.cz  
*Association of Czech At*

Michaela Renčínová  
michaela@rencin.cz  
*Deputy Director*

**Programme Director**

František Dohnal  
dohnal@issss.cz  
*1<sup>st</sup> Vice-President of Vysočina Region*

**Programme Committee**

Tomáš Renčín  
rencin@issss.cz  
*Association of Czech At*

Dana Béroová  
dana.berova@micr.cz  
*Ministry of Informatics of the Czech Republic*

Tomáš Holenda  
holenda@mvr.cz  
*Ministry of Interior of the Czech Republic*

Vít Richter  
vit.richter@nkp.cz  
*National Library of the Czech Republic*

Jaroslav Šolc  
jaroslav.solc@cityofprague.cz  
*City Hall of Prague*

**Executive Staff**

Viliam Dekan  
dekan@issss.cz  
*Conference Documents Redaction*

**Head of Conference Office**

Blanka Brychtová  
Address: U svobodárny 12, 190 00 Praha 9, Czech Republic  
Phone: +420 284 001 284, Fax: +420 284 818 027  
E-mail: issss@issss.cz, brychtova@triada.cz

Vojtěch Dvořáček  
dvoracek@issss.cz  
*Accommodation, Transfers, Logistics*

Prokop Konopa  
prokop.konopa@hauska.cz  
*Public Relations*

Pavel Kubín  
kubin@issss.cz  
*Conference Programme Agenda*

Martina Rojková  
rojkova.m@kr-vysocina.cz  
*LORIS Manager*

Petr Pavlinec  
pavlinec.p@kr-vysocina.cz  
*LORIS Manager*

Petr Palisa  
webmaster@issss.cz  
*Webmaster*

**V4DIS Project Partners**

Katarzyna Hałas  
kasiah@zmp.poznan.pl  
*Union of Polish Cities*

Milan Muska  
muska@zmos.sk  
*Association of Towns and Communities of Slovakia*

Marian Minarovič  
umosr@gtinet.sk  
*Union of Towns of Slovakia*

Veronika Krausz  
krausz@toosz.hu  
*Hungarian National Association of Local Authorities*

## ICT Strategy in the City of Vienna

*Ingrid Götzl, City of Vienna*

Due to Vienna's three official functions, namely as the capital of Austria, as one of the nine federal provinces and as a city, numerous tasks and manifold duties have to be delivered by the city administration to its 1.7 mill. inhabitants. Consequently, the Municipality of Vienna boasts of 70,000 staff, an annual budget of approx. 9.5 bill. €, more than 100 departments.

To achieve a satisfying degree of administration and services Vienna sets itself three general strategic principles:

- Citizen Satisfaction
- Business Location Promotion
- Economic Efficiency

While Information and Communication Technologies (ICT) aims to use their potentialities to make a better life for the people, thus following the motto set by the Mayor and Governor of Vienna, Dr. Michael Häupl: Vienna–Making Data Move–Making Time for People!

The Vienna Chief Executive, Dr. Ernst Theimer, when he took office in 1995, decreed: “Decisive are the needs, the wishes and the expectations of the citizens–how they feel about the results of the City Administration and how they assess and accept the outcome.” And this has been a guideline for ICT since then, taking up customer orientation as its overall goal at a time when it was not so widely accepted as it is now.

### ICT in Vienna

ICT in Vienna has a very long tradition, it started back in the late Fifties–even then Vienna had the reputation of being an early adopter while maintaining simultaneously the needed cautious approach, as befitting a public authority which is financed by taxpayers' money.

The ICT Strategy defines the development and direction of ICT primarily in order to produce correspondence between ICT and the objectives of the “Enterprise“ City of Vienna. Another issue is the

Organisation of the ICT sector (including ICT Controlling and ICT Services) and the coordination and development of the ICT infrastructure.

The Vienna ICT Landscape consists of

- 2 main frames
- 600+ midrange servers
- 28,000+ online PCs in administration (incl. health sector)
- 10,000+ PCs in public schools
- 66 Mill. EUR ICT budget excl. staff
- 900 ICT staff–centralized
- 250 ICT staff in departments–decentralized
- 200+ applications in production

ICT in Vienna is organized in a partly centralized, partly decentralized way:

The Chief Information Office at executive level (Municipal Directorate) with 8 staff, the operative ICT department for municipal departments with approx. 470 staff and the operative ICT department for hospital and care of elderly with approx. 450 staff are centralized departments, while approx. 230 ICT persons work in as much as approx. 80 municipal departments.

ICT strategy aims at ensuring the continuity and affectivity of ICT, the municipality-wide use of common registers, applications and functions and the recognition value of the trademark “Wien“ by similar “look and feel”.

Consequently, the main guideline for Application Development and Maintenance is “Similar services–similar handling”. Communication should be by electronic means, thus allowing information flow to the top management; Internet and Intranet are to be used as a common knowledge storage.



The centralized ICT departments have to ensure the technical future-orientation of ICT infrastructure in order to keep the investment sustainable, to ensure “communicability” between all work places and to offer different access channels to the services offered by the City of Vienna (incl. mobile communication). “Networkability” of all applications follows. Internet is the communication platform, Intranet is THE technical basis for internal knowledge management even if it is still under development. Technical guidelines have to establish and maintain interoperability, ease of use, prevention of media or system ruptures, stable performance of individual services. Especially in e-Government applications, Austrian-wide standards (E-GovG, Identification by Citizen Card, etc.) are used as well as (international) standards for data models, interfaces, security, etc. Extensive use of standard software helps keep ICT costs low, while use of Open Source Software serves as an alternative to Commercial Software in terms of strategy, economics and technology.

Especially in the field of e-Government a cooperation between the Austrian federal government, the regions, cities and townships has been well established for several years.

In the field of ICT there is a clearly defined role for each player: the Municipal Departments keep the “Role of Principal/Buyer/Client” but observant of the strategic ICT guidelines, they have to define their own requests at the customer’s side, do the calculation of profits for new ICT projects they want to commission, do the annual budgeting for ongoing ICT projects/services, are responsible for the final commissioning of new ICT projects/services and have to fulfill their part in the provision of ICT projects and services. For a new application they have to do the final acceptance test and are responsible for the in-time planning for their ICT requests and the needed budget. And finally, they need to provide in time the required departmental know-how for the development of applications and projects.

The operational ICT department has to provide the ICT services in terms of infrastructure, applications etc. in the agreed service level quality, incl. the procurement of ICT resources. The ICT department has to support the department in their request definition (translating departmental requests into “ICT language”). The outcome responsibility for ICT projects and compliance with the strategic guidelines lies with ICT, as well as the building up of required ICT resources and know-how. Finally, the operational ICT departments have to support the CIO in creating and maintaining the ICT strategy.

The Chief Information Office–CIO is responsible for shaping and maintaining the enterprise-wide ICT strategy to ensure the uniformity of ICT applications, infrastructure and data compatibility. CIO defines a set of guidelines for ICT with enterprise-wide mandatory validity, supervises and controls the compliance of ICT applications and projects with the ICT strategy and serves as an escalation forum for the departments as well as the ICT departments if necessary. Further, CIO initiates strategic ICT projects and master plans according to certain directives, chairs executive committees for strategic ICT projects and decides on their prioritisation. Finally, CIO coordinates the relations between City of Vienna and other public authorities in the field of ICT.

Some final words on e-Government, based on the experiences of Vienna from 1997 on–when we started e-Services and e-Commerce:

e-Government does not mean to equal digitalisation with modernisation or to replace analogous bureaucracy by digital bureaucracy (Stephan Jansen, Universität Witten). On the contrary, Vienna adheres to the school of thought that there is much more to e-Government than simply applications, infrastructure, data. Our belief is like a doctrine–we call it “e-Government Mantra” and it says:

- Successful e-Government is not an ICT project.
- Successful e-Government is a Change Project.
- Successful e-Government is promoted by the top management and put in charge of the relevant department.

Its characteristics are formulated as the “10 e-Government Principles”:

- E-Government is more than e-Services. Because: Citizens are more than “Customers”.
- E-Government is of use for all–even for those who don’t use the Internet. Catchword “Multichannel”.
- E-Government means customer orientation which means horizontal integration. Because: Data should be on the move, not the citizens.

- E-Government means vertical integration which means speed and cost reduction. Because: Media rupture hurts!
- E-Government means benefit by BPR. This means, Revolution instead of Evolution.
- E-Government is not for free. Those who want to reap must sow. E-Government needs initial investment to achieve later gains.
- E-Government must bring profit. Otherwise, we tell beforehand. Profit may be non-pecuniary.
- E-Government is about use and usefulness. Only the useful is used. Who would like to develop a product nobody will use?
- E-Government is Usability—for the sake of the user. No riddles, please. You cannot train the user—let the applications be easy-to-use and take only the good lessons from Gameboy.
- E-Government needs PR. New products need advertising. No business would invest heavily and not broadcast their new product widely.

What Did We Achieve? More than 100 eGov applications, the number increases monthly. Approx. 27% use with a 1.9 Customer Satisfaction (Poll 6/2003) of a range from 1—Completely satisfied to 5—Not satisfied.

What's the Use for the Citizen? We offer quick and competent services to citizens with easy and simple access. We aim to make citizens feel not only very well administrated but also well informed and involved, in order to make Public Administration and Politics more transparent and accessible.

What's the Use For the Businesses? To present Vienna as a professional partner to perform the required processes promptly and with a minimum of resources, in order to make businesses say, "This City is in itself a business advantage!"

And What does Administration Get Out of IT/it?

A better return of invest through better services, supervision for free—by the citizens and clients through more transparency of online services. This leads to more satisfaction and identification of the citizens with "their" administration. And a mutual gain for both city and citizens are cost savings that allow successful service delivery in the future.

## EurActiv.cz–Internert Gateway for Europe

*Tereza Hořejšová, Editor-in-chief, EurActiv.cz*

EurActiv.cz ([www.euractiv.cz](http://www.euractiv.cz)) is an independent media portal fully dedicated to EU affairs. EurActiv has an original business model, based on five elements (corporate sponsoring, EurActor membership, advertising, EU projects, and content syndication). The content usage is free.

EurActiv.cz was launched in May 2004 in the framework of the Cross-lingual network of EurActiv portals (led by EurActiv.com–[www.euractiv.com](http://www.euractiv.com)). EurActiv.cz is a part of this prestigious network which is currently available in 11 languages. The official launch of the portal took place in November 2004 and the key-note speaker was the former Czech Commissioner Pavel Telička.

EurActiv.cz publishes daily news coverage of relevant EU issues. We focus on practical elements of the topics we cover. If possible, our team of editors tries to localise the articles to the Czech context. Besides the news coverage, we also publish analyses taken from the content partners of EurActiv.cz (such as think-tanks, NGOs, etc.). Furthermore, link-dossiers with more in-depth coverage of important policy areas are published at the site. EurActiv saves time and raises the information level. All articles are complemented by an extensive list of links relevant for the topic which enables the reader to get the background, relevant materials, etc. Our key editorial principles include relevance, simplicity and permanence. We cover the key EU news. Depth of coverage depends on our editorial assessment of upcoming EU policy decisions and what is of most interest to EU Actors. We provide visual and structured overviews, monitoring policy developments over time and writing short sentence. We follow topics over time, provide reliable databases and interfaces.

Articles are ranked into policy sections. EurActiv.cz currently has seven following sections: Europe Today, Entrepreneurship in the EU, Economics and Euro, Social Policy, Structural Policy, Agriculture and EU-law. Furthermore, a static section about the Structural funds with more in-depth information is available. It is a priority of EurActiv.cz to launch new policy sections. The opening of new sections will depend on the sponsorship agreements. Through sponsorship of new sections, the companies can present themselves as active in the European context and raise their reputation.

Registered readers can get a daily news up-date which is offered for free. It is possible to subscribe only those sections, readers are interested in.

The European community does not exist only in Brussels, it is also being created in the Czech Republic. It is made by citizens that have understood that the developments in the EU do directly affect their lives. If they do not want to be passive observers, they need objective and up-to-date information which also enables them to study the problem more in depth. Portal EurActiv.cz provides this possibility through its content and structure to its readers. Our target groups therefore are:

- EU institutions and their employees,
- State administration,
- Local administration
- Multi-national corporations and big companies,
- SME,
- Media,
- NGOs,
- Academia–experts and students.

### **Contacts:**

[info@euractiv.cz](mailto:info@euractiv.cz), tel. 221 610 209

## **KEŠKULT–Comprehensive electronic statistics about culture and a tool for decision-making support**

*Ján Jenča, Project Coordinator, ISOMI, a. s., Bratislava, Slovakia*

An information system focused on collection and evaluation of statistical data about culture for the needs of the Ministry of Culture of the Slovak Republic and processing of reports for the European Union. The tool monitors nearly 7,000 indicators within the framework of regional classification.

### **Introduction**

Precise and available information conditions the process of successful decision-making. Culture, as an important part of human activity, is no exception. To make these decisions and their projection into financial flows qualified and effective, it is necessary to have high-quality IT tools available. One of them is KEŠKULT, comprehensive electronic statistics about culture.

### **Fundamental objective**

Processing data from individual reporting units into a comprehensive database and providing basic tools for online evaluation and outputs.

### **Previous and current status**

Previous status:

- collection of data by trained persons;
- data accumulation at individual levels;
- at the central level of the ministry, only cumulative data from management institutions of reporting units;
- absence of statistics at the regional level.

KEŠKULT:

- collection of data by means of unified and consistent forms with logical controls;
- establishment of a central database of data for all reporting units;
- online system;
- analysis and outputs up to the regional level;
- data consistency.

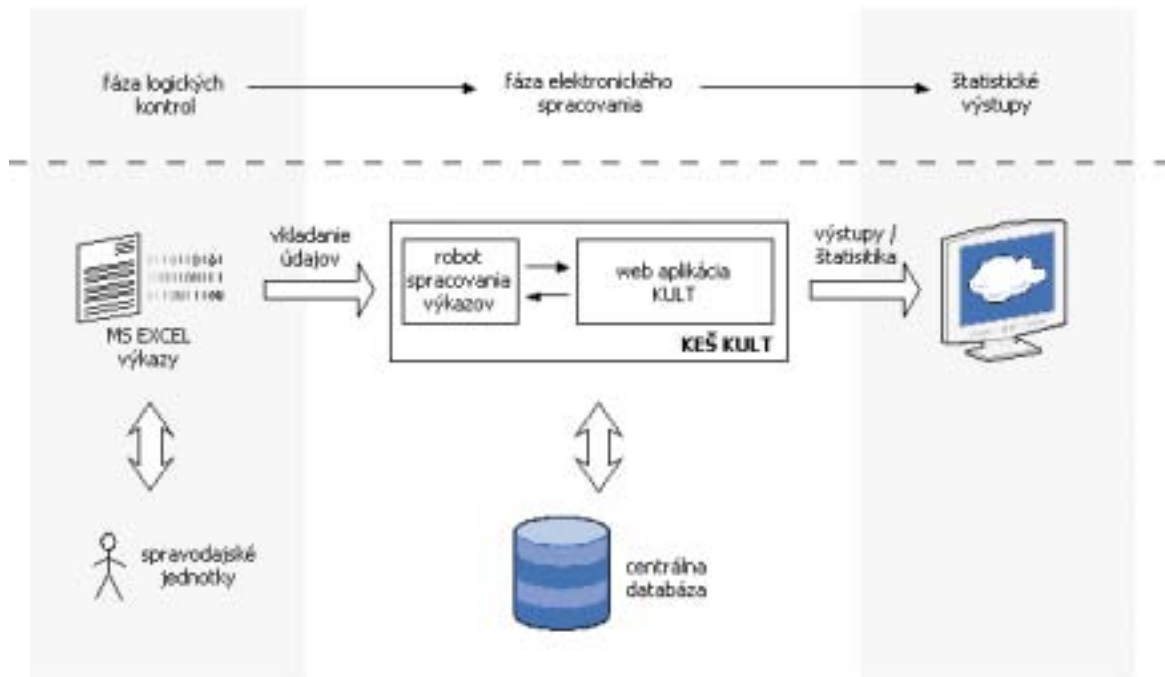
### **Description of the solution**

The solution aimed at creating a centralised system of data collection from several thousands of reporting units of the Ministry of Culture distributed throughout the Slovak Republic. Only some reporting units are online or have connection to the internet, a situation that had to be resolved by means of MS Excel forms. Created on the basis of this situation has been a unified set of forms in the Excel format which is being distributed to individual reporting units. The forms contain a system of logical control, the purpose of which is that when filling them in reporting units have verified correctness of logical bonds between data.

Subsequently developed was a web application on the .NET Framework 1.1, ASP.NET and MS SQL 2000 platform allowing the accredited reporting units to insert the filled-in EXCEL forms into the central database. Insertion takes place in the following steps:

- A specialised parser checks the consistency of the EXCEL form.
- In the case of consistent data, it reads them according to dials into the database.
- A document copy in electronic form is saved on the server.

A total of 17 types of forms, comprising almost 7,000 indicators, are processed.



The forms cover the following areas:

- KULT 1 - 01 annual report on protection of the national monuments fund
- KULT 2 - 01 annual report on financing culture of national minorities and ethnic groups
- KULT 3 - 01 annual report on cultural and edification activity
- KULT 4 - 01 annual report on non-periodical publications.
- KULT 5 - 01 annual report on a music body and artistic ensemble
- KULT 6 - 01 annual report on a gallery
- KULT 7 - 01 annual report on broadcasting of a radio programme service
- KULT 8 - 01 annual report on broadcasting of a television programme service
- KULT 9 - 01 annual report on a museum
- KULT 10 - 01 annual report on a library
- KULT 11 - 01 annual report on audio vision
- KULT 12 - 01 annual report on a professional theatre
- KULT 13 - 01 annual report on the periodical press
- KULT 14 - 01 annual report on an astronomic facility and workplace
- KULT 15 - 01 annual report on a church and a religious association
- KULT 16 - 01 annual report on the activity of an organiser of public events related to professional music culture
- KULT 17 - 01 annual report on theatre festivals and shows

The system contains a reprocessed report of users and their roles. It allows for detailed setting up of access levels and rights to individual functions.

### Statistical outputs provided by the application

Statistical outputs are provided for nearly 7,000 indicators according to the regional classification (the Slovak Republic, regions, districts, municipalities). Outputs can be displayed for individual indicators, but as cumulative outputs in the form of output forms defined on the XML base. The forms are

directly compatible with the forms that are reported in the direction of the European Union concerning culture in a particular country.

### **Conclusion**

The application has been created as a universal application on the .NET Framework platform and is usable for other forms and extension of statistics. The application is prepared for transition to online forms, which is scheduled for the next two years when all statistical units will be connected to the internet.

### **Contact**

ISOMI, a. s., Františkánske nám. č. 7, Bratislava  
jenca@isomi.sk

## **eVillage: demonstrating the exploitation of public sector services on an open source platform**

*Ms. Tünde Kállai, European Project Coordination-Hungarica Sprl.–Brussels/Budapest,  
Gábor Szentiványi, Hungarian Linux Industrial Association (LIPSZ)*

The use of the Internet and other electronic media to involve both the public and business in public service matters and to further internal administrative cooperation, opens up many new opportunities for more efficient public services and for innovative methods of decision-making. Although most states, towns and districts already have homepages providing information to a wider or lesser extent, there remains a European-wide deficit in the area of electronic communication and transaction services.

An important item is the promotion of Open Source technologies, such as Linux, as cost-cutting platform-independent solutions, when implementing the infrastructure required for eGovernment. The e-Village system conversion to Linux is presented as a possible approach for small towns and villages in the enlarged Europe. This approach could strengthen the creation of a European OSS eGovernment Competence Centers network, and involves strong cooperation with Linux Business Development, IBM Germany.

### **Why this initiative in Hungary?**

- 1500 small villages in Hungary under 5000 inhabitants.
- The local authorities do not use information systems for supporting their daily work
- 41% of the computers is older than three years. The hardware and operating systems are heterogeneous, the running costs are very high.
- The officers are not aware of the advantages electronic back office, front office and public services
- Electronic registration of documents does not exist, the officers simply print their documents and registry is traditional
- More than 37.000 pages are photocopied by the officers in one mayor office of the small villages (25.000 inh.) per year
- Local authorities cannot afford building their own complete systems due to lack of budget and resources.

### **Why this initiative with OSS?**

- As of today, business continuity and reliability are non-issues for OSS anymore
- Bypassing disadvantages: migration, interoperability, because there is virtually no IT to build on
- Emphasizing advantages: cost and flexibility
- Cost: extremely low entry level is already usable
- Flexibility I: allows for precise resource allocation, customization and distribution of SW components on demand with no overhead at all (only OSS can do this!)
- Flexibility II: Right sizing service levels with online, remote provisioning

### **How OSS can deliver?**

- Villages are too small to be an entity of IT management: not economic
- Using the microregion as the scale of IT provisioning, targetting 50–70 thousand inhabitants at once
- Set up ASP like IT infrastructure using OSS in the center of the microregion (authentication, file and print services, email, collaboration, knowledge base, document management, database etc.)
- Putting only the minimum necessary components to the endnodes, easing the burden locally (e.g. older PCs can also suffice)
- Three tier software and service management:
- First tier: end users at the nodes
- Second tier: IT administrator at the center of the microregion

- Third tier: High level support from the technology center
- 90–95% of the servicing is on-line between 2. and 3. tier

### Business Architecture and processes

- Handling back-office, front-office, and public services using the same open, core architecture, whose components are connected by well defined interfaces based on open standards only
- Bringing as many as possible resources to the center on the microregion
- Data security through elaborate and flexible access management, digital signature and encryption
- Extendible on demand, as the need rises, typical sequence: back office, then front office, then public services
- Global workflow engine in the center that implements the model of the business processes using open standards
- Processes of crucial importance are already identified
- Interoperability can be tackled as BPR step-by-step

### The project timetable

- 2003 Q3: Creation of a Questionnaire (completed)
- 2004 Q1-Q4: Data collection and analysis on the base of user requirements from PAs, corpus: 100 villages, representing 5 microregions (completed)
- 2005 Q1/Q2: Establishment of an OSS eGovernment Competence Centre in Budapest
- 2005 Q3/Q4: setup of an OSS eGov network in the public and private sector at national and inter-regional level including large-scale dissemination of the e-Village results (mainly in NMS and ACC)
- 2006 Q1- 2007: Starting few pilots in the neighbouring countries (e.g. Czech Republic etc)

### Policy issues

Conditions that shall be fulfilled:

- Policies and the public procurement must secure free competition, freedom of choice
- The national IT strategy (MITS–Hungarian Information Technology Strategy) must support open source, open standards and free competition. National and European support is required from the high level of decision makers (e.g. NORT–National Office of Research and Technology at national level and Structural Funds–e.g. National Development Plan II, to start in 2007 at European level)

### Conference topics addressed by the paper

	Yes/No
<b>1. Technologies for eGovernment interoperability</b>	
a. Service oriented Architecture	X
b. Semantic interoperability	
c. Organisational interoperability	
<b>2. Technologies for change management</b>	
a. Ontology and Knowledge management	
<b>3. Socio-economic models</b>	
a. Business models : Open Source Software, PPP	
b. Case studies and good practices	X
c. Inter-agencies eGovernment services and processes	

### Contacts:

tkallai@axelero.hu, gabor.szentivanyi@lipsz.hu



## CALIMERA Project–Cultural Applications: Local Institutions Mediating Electronic Resource Access

*Šárka Kašpárková, Project Coordinator*

The CALIMERA project links up to several successful projects run in the Czech Republic in whose implementation Czech libraries in particular participated to a significant extent. From libraries, as crucial heritage institutions, it was just a short step to other custodians of the cultural heritage, namely, museums and archives. For better understanding of the project, I will give a brief account of the two previous ones.

The PuBliCa (Concerted Action for Public Libraries) project was approved on 22.8.1998 in Belgium in the presence of representatives from 23 European countries. It was financed from the 3rd framework EU Research and Technological Development Programme. An important moment was the project's extension to include other Central and Eastern European countries. Prepared for the new countries were exchanges of specialists, while training centres were also singled out (Great Britain, Denmark, Finland, Norway, Slovenia and now also Greece). The aim of the project was to support cooperation and organisation of pan-European working seminars. Representatives from the Czech Republic also had the possibility to take part in several workshops.

In 1999 within the PuBliCa project a workshop was held not far from Ljubljana (Slovenia) and was thematically focused on drawing up of projects. The Czech Republic was represented by: Mgr. L. Pavlicová from the B. B. Buchlovan Library in Uherské Hradiště, Ing. M. Svobodová CSc. from the Municipal Library in Olomouc and Dr. Š. Kašpárková from the Kroměříž Region Library. Other participants were from Slovenia, Albania and Slovakia. The project that was drawn up concerned the establishment of training centres for librarians and, consequently, professional education. Unlike at present, at that time educational centres did not exist in regional libraries. Professional education was circumstantial and non-conceptual.

This project opened up the path to common European learning in the educational centres built up. A great experience in particular was being familiarise with the structure of creating European Projects, their financing, with recognisable and non-recognisable costs. The workshop programme was extremely demanding. The training was supervised by Rob Davies and David Fuegi. Completed projects were processed into fiches. Experience with European projects was non-existent, especially on the part of representatives of public libraries from the Czech Republic. The great unknowns were logical frameworks, use and application of SWOT analysis, naming partnerships and use of co-financing.

A big benefit was undoubtedly project drawing up itself, including the remarks of tutors, as well as meetings with foreign colleagues.

The second project that the CALIMERA project immediately linked up to was PULMAN - Public Libraries Mobilising Advanced Networks–[www.pulmanweb.org](http://www.pulmanweb.org). It was financed by the European Commission within the 5th framework EU Research and Technological Development Programme. The project was launched in May 2001 and officially concluded in May 2003. The project manager was Rob Davies (MDR Partners–Great Britain) and the coordinator Jan van Vaerenbergh, Director of the Municipal Library in Antwerp. The projects dealt with 4 issues:

- support for the development of democracy and civic society;
- support for economic and social development in the conditions of a region and municipality;
- support for making accessible the diversity of cultural heritage in regions;
- support for lifelong education, with the major goal being establishing not only a physical but also virtual network of libraries that would provide integrated services to all citizens.

The project was focused on European public libraries and cultural organisations playing an important role in social development (e-Europe). It enhanced the sharing of practical experience and information in the digital era. Working on project tasks were representatives from 26 European states, while the project was later extended to include other partners, for example, Turkey and Russia. The output was the Guidelines of the PULMAN project, translated into all languages of the participating countries. They are structured into three levels: guidelines of a socio-political nature, guidelines for

management, and guidelines for specialist activity. Thus, they concern all aspects of public libraries' innovative services, in particular: promotion of services for physically handicapped persons, lifelong education, social integration, digital literacy, e-Government, copyright law, legislation etc. Another objective was to organise conferences at the national level focused on extension of cooperation between public libraries, archives and museums.

The project coordinator in the Czech Republic was PhDr. Miroslav Ressler from the National Library of the CR. Representatives from public libraries attended several workshops held at the above-mentioned educational centres. Their experience was published in the professional press. All other information for the Czech Republic can be found on the National Library of the CR's website [www.nkp.cz](http://www.nkp.cz). The National Library of the CR also issued in printed form Guidelines of the PULMAN project of December 2004. The document was also published in electronic form and in the English version on the aforementioned PULMAN website.

The CALIMERA project—[www.calimera.org](http://www.calimera.org)—is a continuation of the previous projects, directly linking up to them and drawing upon the knowledge and information acquired from the projects. One of its objectives is coordination of activities that are directly focused on information technologies within the EU, with the main role being played by local heritage institutions (libraries, museums, archives). Evolution of information technologies and strategies is a contribution to the development of services for citizens and their use in everyday life. It is also one of the reasons why the project monitors and recommends information technologies suitable for requirements commensurate to the needs of local cultural institutions. Selected technologies will aim at satisfying user needs through user-friendly services which will allow for access to digital documents at a favourable price. Services will run interactively by means of personal communication without language barriers. Emphasis is placed on partnership of heritage institutions. Forty-eight representatives of European states cooperate on the project. The project was launched in December 2003 and will last 18 months.

The project manager and scientific coordinator is Rob Davies from the British company MDR Partners (he took part in the ISSS 2004 conference in Hradec Králové and reported on the CALIMERA project). Also participating in management are individual members of MDR Partners assigned with partial tasks. Financial coordination is ensured by Ana Maria Runkel from the Department of Libraries and Archives of the City of Lisbon (Portugal). In the coordinating and steering group, the National Library of the Czech Republic is represented by PhDr. Adolf Knoll. The National Library is also the guarantor for work on the project in the Czech Republic. A working team has been set up for this activity consisting of representatives of the following heritage institutions: the National Library of the Czech Republic, the Regional Library in Karlovy Vary, the Municipal Library in Chrudim, the Moravian Land Archive Brno, the Moravian Slovak Museum in Uherské Hradiště and the Kroměříž Region Library, which has become the national coordinator. After the project's intentions had been made public, other institutions applied expressing their interest in cooperation. The following institutions significantly participated in the project at an external level: the Archive Administration of the Ministry of the Interior of the Czech Republic and the Association of Museums and Galleries.

### **Course of individual stages of the CALIMERA project in the Czech Republic**

The first meeting took place on 16.–17.1.2004 in Brussels. The introductory seminar was dedicated to familiarisation with the project and its individual activities. In the first few months mapping of the organisational structure and management in individual states was carried out. A list of all competent bodies and organisations responsible for the activity of individual institutions was drawn up. A list of firms participating in and/or having experience with digitalisation of cultural heritage was provided. Concurrently with these tasks, the status in individual countries was ascertained on the basis of a questionnaire survey. The questionnaires were focused on interesting projects that have been or are being implemented in heritage institutions. The questionnaires were collated by Prof. Peter Brophy from Manchester Metropolitan University. I must point out at this juncture that attention in this project was primarily focused on museums and archives. Libraries were dealt with by the previous project, PULMAN, which drew attention to the necessity of cooperation between heritage institutions. A

collection of all questionnaires in electronic form was made public on the CALIMERA project's website.

In April a working seminar was held at the National Library of the Czech Republic. It was attended by approximately 50 specialists from the whole of Europe. The objective of the discussions and workshops that took place during the course of the seminar was to comment on the given issues and discuss them in working groups. Working groups were represented by individual states. It was truly impressive to gain experience from colleagues from various European institutions. In content terms, the workshop was prepared by the Greeks, who proved to be extremely active and were also entrusted with the project's website management. Inspiring was the mutual information exchange among participants and the resulting topics for the projects: for example, definition of the size of a local institution for the project (every country may have a different concept), harmonisation of standards in the EU, creation of missing standards, digitalisation of documents and their making accessible etc. The main goal was to gain practical experience aiding local heritage institutions. At the end of the seminar several presentations took place focused on virtual mediation of cultural heritage and also connected with education at schools and, furthermore, the tourist industry.

Subsequently, situation reports for individual institutions were drawn up. Libraries had already been processed within the previous project, but it was necessary to update the entire report since over the two years a lot had changed both in terms of legislation and libraries' structure. This report for the Czech Republic was elaborated by PhDr. Miroslav Ressler from the National Library of the CR. Also produced were reports for the network of museums (Mgr. Dagmar Fialová) and archives (PhDr. Lenka Linhartová). The reports had to be translated into English and within the determined deadline sent to the project coordinator. For the sake of uniformity and lucidity, the reports had a uniform structure defined in advance. At present, you can find the reports in the Czech version on [www.nkp.cz](http://www.nkp.cz) and in English on the project's website.

During the course of the project, several specialist seminars took place, with the participation of specialists from the Czech Republic. The seminar on web accessibility in Vilnius was attended by Ing. J. Kaňka from the F. Bartoš Regional Library in Zlín, the seminar on availability of documents in Grob (Slovenia) by Mgr. Lucie Křížová from the Moravian Land Archive in Brno. More detailed information was provided at the Archives, Libraries and Museums in the Digital World international conference in December 2004. Both papers were also published in the conference proceedings.

In the summer a questionnaire aimed at ascertaining the level of professional education at secondary schools and universities in individual countries and the possibilities of lifelong education in this direction was circulated. The National Library of the Czech Republic participated in its processing. Taking place at the same time was a survey concerning web accessibility in involved institutions and cooperation at the local level.

In the autumn of 2004 intensive work commenced in relation to the project output that should form the Good Practice Guidelines for museums, archives and libraries. Since January 2005 the full electronic English version can be found on the CALIMERA project's website. By March 2005 the Guidelines were scheduled to be available in 28 national languages. The Czech version will be available on the website of the National Library of the CR, as well as on the project's website. The Good Practice Guidelines will be a valuable and practical aid for specialists in local culture and professionals working for local cultural institutions—museums, libraries and archives. The Guidelines consist of 23 independent recommendations forming the social, management and technical sections. Each chapter is supplemented by references and links.

In January 2005 the conference took place in Copenhagen. Invited to this conference were representatives of national institutions. Attending for the Czech Republic were representatives of the Ministry of Culture. The programme was focused on the strategic role of social development in line with the context of practical experience gained from Europe, working models of cooperation between European museums, archives and libraries.

The main goal is to point out that new technologies can facilitate the development of digital services intended for meeting the requirements and needs of all users—social, cultural and economic needs—and at the same time stimulate them for extension and support by the professional public. This

support also leads to easier understanding of the manner in which local cultural services can play a key role in fulfilling fundamental objectives in Europe, including the e-Europe action plan.

The project also develops synergies from related activities in the area entitled Heritage for All—the projects CHIMER, CIPHER, COINE, ACTIVATE and others. Furthermore, it keeps track of information outputs which are the result of the MINERVA project.

The project will conclude in May 2005. The results of cooperation between 48 representatives of European countries will be made public and published. It solely depends on us how we will be able to make use of the acquired knowledge for everyday practice in institutions. How we will be able to use partnership during mutual cooperation in joint projects whose purpose should be availability of electronic information for users and goal the creation of “electronic memories of municipalities” which would thus make accessible and at the same time preserve regional cultural values.

Project duration: 1.12.2003–31.5.2005

**Electronic information used:**

<http://www.nkp.cz>

<http://www.pulmanweb.org>

<http://www.calimera.org>

## Trans-European eGovernment—how to exploit the benefit

*Achim Klabunde, eTen Project Officer, DG Information Society, European Commission*

Trans-European, borderless eServices contribute to the achievement of social cohesion and the European social model, labour flexibility, modernisation and transformation of administrations leading to reductions in administrative burdens on citizens and businesses, all of which contribute to the achievement of growth and the Lisbon objectives. The deployment of such services requires coordination and co-operation across national borders, both by the public sector and private enterprises. The European Union aims to facilitate and encourage trans-European co-operation through a number of measures, including support to projects. The actions which were conducted in the framework of the eEurope 2005 Action Plan will need to be continued in the coming period, to realize the Union's economic and social objectives.

### **eGovernment is important to increase Europe's competitiveness**

eGovernment is already significantly increasing the efficiency and quality of public services.

The use of electronic public procurement can reduce costs by as much as 5% of the total (as described in the Commission's electronic public procurement Action Plan.) Public sector purchases in Europe represent about 15–20% of GDP, that is some €1500–2000 billion (!). Saving just 1% of such costs means saving tens of billions per year.

eGovernment can also significantly increase the quality of public services. It helps to increase the transparency of public administrations, and thus fight corruption and encourage better implementation of public policies.

The importance of eGovernment for the efficiency of the public sector was also highlighted in the Commission's 2004 Competitiveness Report.

Finally, we have been investigating the relationship between national innovative strength, based on the Commission's innovation scoreboard report, and the perceived quality of public administrations, based on data from the World Economic Forum. This relationship appears strong, suggesting that the quality of public administrations matters for innovative successes—and thereby competitiveness—at the national level.

In these cases the benefits are less time lost and cost savings for businesses or citizens. This immediately benefits Europe's economy.

### **What is the Commission doing to promote take-up of eGovernment services?**

Take-up is the key to eGovernment success. Successful eGovernment is promoted through “success stories” and efforts to spread good practices.

European eGovernment Awards were made by the European Commission at the eGovernment Ministerial Conference of 2003 and the prizes will again be given in the November 2005 eGovernment Ministerial Conference in Manchester, UK. The 60 best cases are also expected to be presented at an exhibition at the conference. This is a prestigious Award, with a very high level of interest<sup>1</sup>.

There is great potential for promoting and exchanging good practices across Europe. The Commission has recently awarded a contract to set up an eGovernment Good Practice Framework. This will not only give visibility to successful cases but also analyse them so that learning from others' experiences and the transfer of good practice are accelerated. Other studies recently launched, include work on electronic identity and interoperability.

---

1

[http://europa.eu.int/information\\_society/activities/egovernment\\_research/minconf2005/awards/index\\_en.htm](http://europa.eu.int/information_society/activities/egovernment_research/minconf2005/awards/index_en.htm)

The eTEN programme provides possibilities for large scale validation of pilot eGovernment services, so that they can ultimately achieve a wide take-up.

The main efforts to increase take-up are made by Member State authorities. They use a variety of means, from financial or time incentives (e.g. permission to submit a tax filing later online than by paper) to actively promote the use of online public services.

The need for better insights into impact and take-up has been pointed out in the Commission's eGovernment Communication and in the Council Conclusions on eGovernment. Consequently the Commission has recently launched, under the MODINIS programme, a study on financing/economics/benefits of eGovernment, which will help shape the design of a new impact measurement framework.

A study on take-up is being undertaken by the eUSER project, financed by the EU's Information Society Technology programme. Results will be available in a few months.

### **Next steps for the EU to enhance the use of eGovernment in Europe**

Concrete steps include:

- Promoting the exchange of good practices, through the eGovernment good practice framework, eGovernment Awards and Ministerial Conference, where take-up and impact will be made highly visible;
- Good practice related projects, as well as pilots in the eTEN programme that demonstrate impact and provide the building blocks and examples of replicable solutions;
- Inclusion of eGovernment as part of i2010–Information Society 2010, the new and comprehensive ICT strategy as announced by Commissioner Reding;

Further cooperation between Member States is actively being pursued, e.g. within the eGovernment subgroup of eEurope 2005 and programme committees on major issues such as the measuring take-up and impact, the use of electronic authentication for public services and interoperability.

### **Conclusion**

The continuation of the activities aiming at take-up will also be a key element of the ICT Policy Support Programme, which the Commission will propose as an element of the Competitiveness and Innovation Framework Programme.

## Blind Friendly in Slovakia

*Branislav Mamojka, Slovak Blind and Partially Sighted Union*

Blind Friendly could be interpreted as “friendly to blind people: which is a little bit simplified expression of the world wide struggle to ensure accessibility of information disseminated through Internet also to people with disability and other special needs, among which the most serious problem perhaps have blind people. Our objective and purpose of the initiative Blind Friendly is thus to contribute to accessibility of web pages for people with visual or other impairments in Slovakia, too. We have joined the world wide initiative and with gratitude we utilize experience and assistance of our Czech colleagues from Czech Blind United, who successfully provide the service Blind Friendly for several years.

The objective is not to assess technical level of web page design in general, but only those parts having an immediate influence on their accessibility. Thus our evaluation is made from customers' point of view.

Of course, the first step of evaluation is focused on standard accessibility criteria formulated by W3C/WAI and tested by specialized validators as BOBBY, but also by validators for the standard coding as W3.ORG used by many authors of web sites. Validators also evaluates features not having essential or direct impact on accessibility features, but their are of basic importance for clear coding. Strict coding is, however, an important and useful precondition for correct functioning of various assistive technologies, like screen readers, getting information just from the source code. It is important also for people, who do not need special assistive technologies yet, since their low vision is compensated by standard tools built in standard browsers (like possibility to change size of letters or their colors), correct functioning of which is conditioned by accurate coding.

The second, but from our user's point of view, the more important step is the subjective evaluation by visually impaired users themselves in cooperation with sighted specialists. There are web pages fully meeting requirements of validators, and, at the same time hard accessible due to subjective reasons as e.g. combinations colors and their contrast, complexity of structure, complex navigation or layout of elements. There are sites recognized by validators as not accessible, but by use of modern assistive technologies they might be fairly well accessible, at least to some people with a given visual impairment. For instance, most of blind computer users in the Slovakia are using special talking screen reader called JAWS, world wide top product in its category. JAWS can fairly good manage some web pages recognized by validators as less accessible. It is matter of fact that in the field of assistive technology there exist fast development and rules of accessibility were formulated in a given time at level of knowledge actual at that time.

Currently used Web content accessibility guidelines (WCAG 1.0) recommended by World wide consortium (v3C) were issued in year 1999. At present the second version (WCAG 2.0) is in preparation phase. It is based on response to WCAG 1,0 and the objective is also to apply rule on wider range of technologies and to formulate rules in simpler and in language intelligible to wider group of people.

The strict observance of the web design guidelines creates conditions for maximal accessibility of web pages by the fact that it enables standard browsers and screen readers to react more appropriately to the concrete situation on the screen. At the same time, it provides web designers by a large space for creativity including the field of accessibility. But validators are not able to test how effectively they will utilize this opportunity. There may exist situations in which a blind visitor of a web site will have access to information, but the navigation structure is too complex or visually oriented In such a way that the search for information will be cumbersome and time consuming, content of information will not be enough informative and the visually impaired visitor will be overloaded by redundant information in which the core information will be lost. This is also a reason why we recognize the evaluation by automatic validators as a first necessary step. Only the follow/up subjective evaluation is recognized to be a key to accessibility.

In the subjective evaluation needs of people with different visual impairments have been taken in account. For instance, page evaluated as accessible for the blind can be not accessible for the par-

tially sighted due to inappropriate choice of foreground and background colors, insufficient contrast or due to use of absolute values instead of relative ones, which disables change of the font size.

It should be stressed that we are still speaking about a relative accessibility. There will always exist visually impaired or elderly people, for which certain web pages will not be enough accessible, e.g. for complex control or use of new graphical effects. It could be also the case for people without visual impairment, e.g. due to too complex structure or due to use of less intelligible language. But just those elderly people with impaired vision will create still larger part of population. Thus, the task is to increase level of accessibility for all and to decrease number of people for which all or some web pages are not accessible.

For several years we have been striving to push forward the principle of web accessibility and information to the partially sighted and blind people. We succeeded to incorporate the task to ensure by legislation the web accessibility into the “National program of development of living conditions for disable citizens in all fields of life” adopted by Government decree no. 590 of

27. June 2001. The tasks concerning accessibility are also included in the “National strategy of informatization” adopted by the Government decree no. 43/2004. The principle of accessibility was also presented at the conference ITAPA 2003 and in previous year we participated at the accessibility criterion evaluation for the competition ZlatýErb.sk (Golden Heraldry).

Accessibility of web pages becomes still more and more important also for blind and partially sighted people. With help of assistive technologies the electronic information becomes a directly accessible resource independently of help of sighted people. In the same way as sighted people, they need to use still more prevalent means of eGovernment which will give to them an additional dimension of independence. Therefore we welcomed an offer of help and will to assist us by Czech colleagues when applying their methodology Blind Friendly in Slovakia, Initiative and cooperation by the MGO eSlovensko, Union of towns and support of the Ministry of Telecommunication, which enabled us to put in life also here the initiative through the special web page [www.blindfriendly.sk](http://www.blindfriendly.sk).

It seems that implementation of the principle of web accessibility starts to accelerate and there is also more interest concerning this problem by Government institutions, self-governments, and companies. One of reasons for implementation delay is the fact that there exist a huge number of web sites and to make them accessible might be more expensive and time consuming than to create a new page meeting the disability guidelines. The next problem is the fact, that accessibility is understand as the highest level of accessibility - meeting of all accessibility guidelines and subjective tests. But the way to accessibility can be also gradual and therefore there are defined three levels of accessibility in WCAG 1.0 and in methodology Blind Friendly as well. Also the lowest level, assigned as bronze, represents a significant level of accessibility for some visually impaired people equipped by appropriate assistive technology.

Our main task, for nearest future, is to create a group of well trained visually impaired and sighted testers, to be able to satisfy growing demand for subjective testing.

We believe, the web site [www.blindfriendly.sk](http://www.blindfriendly.sk), will become a useful locality for authors and owners of web sites. We would like to express our gratitude to all who have already helped us and to those helping us in future to maintain and develop technical level and content of this web site. We hope that the idea of Blind Friendly will be successfully disseminated, will get support from web designers, and legislation support as it is in many EU countries including our Czech colleagues.

This process will certainly be accelerated by actual EU initiatives for standardization also in this field.

**Contact:**E-mail: [mamojka@unss.sk](mailto:mamojka@unss.sk)Internet: [www.unss.sk](http://www.unss.sk)



## Civil Servants Back to the Classroom

*Katarína Mandíková, Ministry of Transport, Post and Telecommunications of the Slovak Republic*

In our paper we present experience from the pilot project of certifying ICT skills of the employees of two institutions of the Slovak state authorities, namely, the Ministry of Transport, Post and Telecommunications, and the Civil Service Office. The ECDL (European Computer Driving Licence) has been used for the certification. The project has been run in three stages and in the paper we analyse the course of each of them. The final results reflect the actual level of the ICT skills of the civil servants in the Slovak public administration. We analyse the results from position, gender, age and other points of view. We examine and evaluate the post-certification questionnaires. In our paper we also speculate about the plans for an analogical large-scale process for all 40,000 civil servants in the near future. We also present some pro and con arguments concerning the ECDL certification itself.

### Introduction

The European Computer Driving Licence (ECDL) is a qualification programme whose aim is acquisition and documentation of digital literacy (i.e. knowledge and skills necessary for effective ICT use). The ECDL provides an elaborate, attested and recommended qualification standard of fundamental digital literacy.

With regard to these facts, the Ministry of Transport, Post and Telecommunications of the Slovak Republic (hereinafter referred to as the “MTPT SR”), which in competence terms shelters informisation of society, and the Civil Service Office (hereinafter referred to as the “CSO”) have decided to survey the digital literacy of their civil servants precisely by means of the ECDL.

### Before the project

The target group was formed by all civil servants of the MTPT SR (227 participants) and the CSO (33 participants). The ECDL qualification programme consists of seven modules:

Module No.	Module content
1	Basics of information technologies
2	Computer usage and file management
3	Text processing
4	Spreadsheet program
5	MS Access–databases
6	Graphic potentialities of PC (Power Point)
7	Information and communication networks

The programme provides the possibility of passing exams from seven or four modules (ECDL start). In the former case, the participant acquires an international licence, in the latter a licence with national validity. With regard to the needs of civil servants pertaining to digital literacy, we decided that every civil servant would take part in the ECDL start.

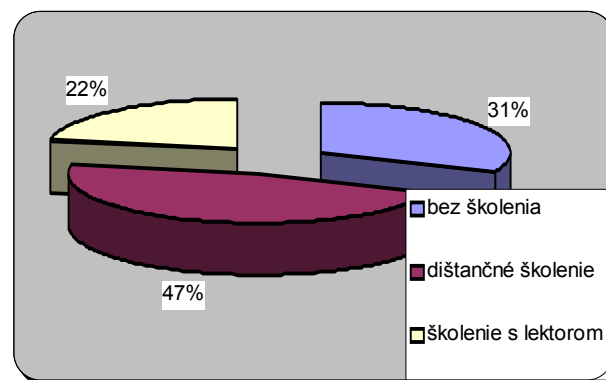
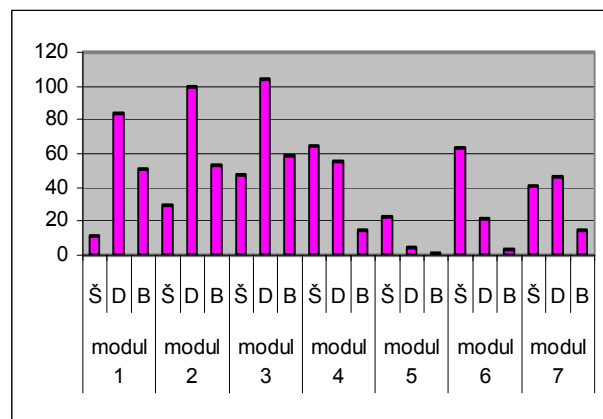
The pilot project at the MTPT SR and CSO was divided into three phases:

- survey of civil servant’s digital skills;
- training of civil servants;
- testing of civil servants.

In the conclusion of the project we asked the participants to fill in an output questionnaire in order to acquire feedback and be better able to plan further procedure for educating civil servants. Owing to my work at the MTPT SR, in the paper I describe in detail the project’s phases only at this authority.

**Phase 1: Survey of civil servants’ digital skills**

In this phase of the project, which started in February 2004, every civil servant verified on his/her personal computer the quality of his/her digital literacy. We obtained a testing programme by means of which employees could in a certain time section assess and consider the necessity of their education prior to the ECDL’ “real testing”. Following the evaluation of questionnaires, we divided the participants into three groups according to the necessity of their education. Gratifying is the fact that the prevailing part of employees (47%) chose the form of distance learning, as is shown in the graph: 31% of participants considered their knowledge sufficient and did not want to being trained before testing. Only 22% of civil servants gave preference to the form of attendance training. When we look more closely at the individual modules and the interest in studying them, it is somewhat surprising that employees during training in Module No. 6–Graphic potentialities of PCs and electronic presentation–preferred the form of attendance training with a tutor as opposed to distance learning. It is evident that civil servants do not have experience with this application, but many of them have begun to need it for their work. As we presumed, the highest number of employees chose the first three modules (basic work with PC, file management and Word), which probably reflect the biggest part of their work with ICT.



Legend: Š–training with a tutor D–distance learning, B–without training

How did we handle this project phase?

Positives of Phase 1: A gratifying aspect was that we found great support on the part of the Ministry’s management. It should be pointed out that without the project’s “hard” enforcement by the Ministry the pilot project would not have been carried out at the MTPT SR.

Negatives of Phase 1: During evaluation, many employees stated that they considered such an activity useless and that they did not need the ECDL certification for their work. Only a relatively small proportion saw sense in a systematic survey of their digital skills. It was revealed that for such

projects it would also be necessary to improve authorities' computing equipment since in many cases it was extremely obsolete and, accordingly, unsuitable for distance learning.

## Phase 2: Training of civil servants

On the basis of the questionnaires filled in by them, we divided the civil servants as follows:

- employees who owing to their knowledge do not need training in ICT;
- employees for whom training in the distance form is suitable;
- employees who must undergo ICT training in the attendance form, i.e. training with a tutor.

In July 2004 we launched distance learning at the MTPT SR and made it accessible to the entire target group. Training with a tutor took place continuously from September 2004 in facilities which had the respective accreditations and had won a public tender. Participants attended a total of 240 instances of training with a tutor. In comparison with the required 197 instances of training in the first phase, it represented a slight increase, from 22% to 27%. In the case that an employee reconsidered the form of his/her training and came up with a requirement, we were able to meet the requirement and include him/her in the attendances courses. Transfers also resulted in reduction of the number of civil servants who did not want to be trained at all, from the original 31% to 26%.

Analysis of the output questionnaire showed that fewer than 2% of participants in the training with a tutor declared that the training did not help them. As regards the participants in the distance learning, it was 2.61%. Other employees who participated in one or both types of training stated that the training helped them to a smaller or larger extent. We estimate from these results that it is right to allow participants to choose from both types of training since different types of training can be suitable for everyone.

Despite the fact that a relatively large proportion of civil servants declared in Phase 1 that they did not need any training prior to exams, we could see from the participation in the distance learning course that they had educated themselves in this form. Hence, we consider it right that all employees have access to distance learning. Frequently, participants in attendance training after having passing it "ventured" to take part in additional learning in the distance course and, accordingly, made use of both possibilities—attendance training and distance learning.

Financial costs, hourly subsidies and the numbers of participants in individual types of training courses are show in the following tables:

**Attendance training**

Module	Length of training	Number of participants	Cost per participant (incl. VAT) in SKK	Cost for the total number of participants (incl. VAT) in SKK
1. Basics of information technologies	8 hours	8	400	3,200
2. Computer usage and file management	8 hours	24	400	9,600
3. Text processing	16 hours	39	800	31,200
4. Spreadsheet program	16 hours	58	800	46,400
5. MS Access—databases	16 hours	58	595	34,510
6. Graphic potentialities of PC (Power Point)	8 hours	21	952	19,992
7. Information and communication networks	8 hours	32	400	12,800
TOTAL (incl. VAT) in SKK				SKK 157, 702

**Distance learning**

<b>Module</b>	<b>Length of training</b>	<b>Number of participants</b>	<b>Cost per participant (incl. VAT) in SKK</b>	<b>Cost for the total number of participants (incl. VAT) in SKK</b>
All seven modules	July 2004-January 2005	Prepared for 226 participants	-	SKK 111,860

Positives of Phase 2: We see major benefits in the fact that a lot of participants chose distance learning, whose advantages were as follows:

- learning provided at an arbitrary time and from one's own office, possibly home (if a participant has an internet connection);
- integrated provision of information to a large number of employees;
- shortening of the time of employees' absence from their workplace;
- choice of an individual study pace;
- control of one's own success rate;
- the possibility of selecting areas to which participants need to devote more deeply;
- ensurance of the maximum effectiveness of outlaid costs.

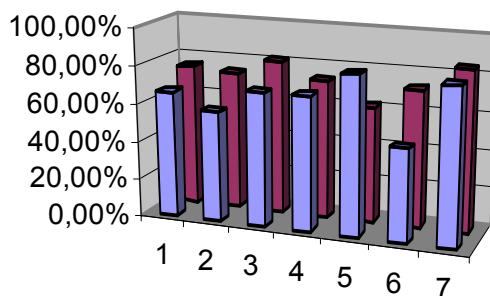
Negatives of Phase 2: In Phase 2 we also encountered the problem of improper equipping of the ministry with computing technology. Some employees could not make use of the benefits of distance learning since it was not possible due to obsolete computing technology. Many civil servants could not participate in the planned training because they were too busy with work. In one case, a superior worker did not see any benefits in educating his employees and did not allow them to take part in training because of other tasks. It appeared that despite the fact that in the entry questionnaire the direct superior was supposed to confirm by his signature the four modules most used by a subordinate at work, it did not happen so, and some employees chose modules they did not work with; therefore, exams were extremely demanding for them as beginners in the additional training. Another problem rested in the fact that some employees had software older than that used during training and subsequently at exams. There was also the problem of a different operating system; the MTPT SR uses Lotus for e-mail, but exams had to be, due to the purchased licence of the Slovak Informatics Society, in the Outlook application.

### Phase 3: Testing of civil servants

Testing of the pilot project's participants was prepared for 200 persons. In each project there is always a problematic group of participants (10%), there are various obstacles due to which testing of this group is not feasible. Health problems, workload, unsatisfactory computing technology, unwillingness to learn and/or be tested etc. Exams started in December 2004 and ended with the final corrective exams on 27.1.2005. They lasted 16 days, with approximately 60 exams taking place every day.

Of the 200 participants, 188 employees physically took part in the exams; however, three refused to agree with making their data public and one employee only took part in one module, therefore, their exams are not valid. The twelve remaining employees did not take part in the exams, either having apologised or without stating the reason. Hence, we carried out the evaluation of exams on a group of 184 civil servants.

**Comparison of success rate of modules according to sex**



	1	2	3	4	5	6	7
ženy	66,67%	58,44%	70,24%	70,73%	83,33%	48,65%	81,58%
muži	75,00%	72,97%	81,11%	73,13%	61,11%	72,09%	84,44%

In brief, we state several basic items of data:

- the proportion of successful exams from all modules was 71% (526 exams);
- the proportion of successful participants was 60% (111 employees);
- the most successful module was No.7–Internet and email, in which there was an 83.13% success rate;
- the least successful module was No.6–Power Point, in which there was a 61.25% success rate;
- the highest number of participants (95%) chose Module No. 3–Word;
- the lowest number of participants(13%) chose Module No. 5–Databases;
- the highest number of participants chose the 1234 combination of modules (43 employees);
- the number of module combinations chosen for exams was 23;
- the success rate of exams grew in correlation to higher working position, with the least successful being the group of officers (36%) and the most successful the group ranging from councillors to senior managers (71%);

Post	Number of exam participants	Success rate	Successful	Post
1	11	36%	4	Specialist and senior officer
2	90	53%	48	Principal, specialist, independent councillor
3	83	71%	59	State, main state, general state councillor and higher
Total	184	60%	111	

- in general, the success rate for men was higher (65.66 %). For women the success rate was 54.12%;
- in one module–Databases–women were significantly more successful than men (women–83.33%, men–61.11%);
- women were least successful in Module No.6–Power Point, and most successful in No.5–Databases;
- men were least successful in Module No.5–Databases, and most successful in No.7–Internet;
- the most successful were three ministry sections, with a 100% success rate;
- the least successful was the section working 90% with texts–its success rate was only 28%;
- the most successful group of employees were those aged 30 to 40, for whom the success rate reached 81.08 %;
- the least successful group of employees were those aged between 60 and 65;

- the highest number of examined persons were those aged between 50 and 60, namely, 58 persons with the success rate of 43.10 %.

After they had taken the exams, we asked the employees to fill in an output questionnaire. We prepared 20 questions focused not only on the pilot project but also ascertaining facts that should affect the further direction of our employees' education pertaining to digital literacy. 120 questionnaires were returned to us within the deadline, 116 of which were filled in. We state some data from the questionnaire:

- 81.03% of people considered the ECDL certification project at our ministry to be beneficial; 10.34% did not view the project as having any relevance;
- 35.96% answered positively the question of whether they think that all civil servants in Slovakia should pass the ECDL certification;
- the biggest problems with the project were caused by work overload (43.97%) and obsolete computing technology (35.34%);
- more than 67% of participants were satisfied with the selection of their modules;
- the exams were considered appropriate to the largest group of participants (36.28%);
- the most complaints during the exams were connected with lack of time (45.13%) and ambiguously formulated questions (34.51%);
- the greatest problems were related to Module No. 1–Basics of ICT;
- the least problems, according to participants' subjective assessment, were related to Module No. 3–Text processing;
- only 3.54 % believe that computer literacy is not necessary for civil servants;
- more than 62% of employees work on PCs almost the entire time at work, with only 3 stating that they do not work with PCs at all;
- 100% of employees use Word for their work, almost 38% Excel;
- the highest number of civil servants rate their digital literacy at grade 2 (grading from 1 to 5);
- up to 61.21% of employees also work on PCs at home, over 40% have internet at home or are considering its implementation within a short time;
- no participant states that they do not need the internet for their work, two employees do not use Intranet;
- only 3% state that they do not want to have the internet at home;
- a relatively large number of employees would like to participate in further education pertaining to digital literacy in 2005. Word for the advanced–46.36%, PowerPoint–42.43%, Excel and Excel for the advanced–more than 56%, databases–38.18%, internet–24.55%;
- about 10% of employees expressed their desire to pass exams in another three modules, thus acquiring the international PC “driving licence”.

In the 20<sup>th</sup> question, employees presented their suggestions and comments. Below we list a few opinions concerning this issue:

- I evaluate as positive the fact that I could take part in training I would not otherwise have been able to participate in since they would have said that it was useless for us. I consider negative the fact that the exams were held at an unsuitable time, at the end of the year, and they had a long interval from the training. I also negatively evaluate (this concerns MTPT information scientists) the fact that the exams were done on Windows 2000, whereas I have Windows 98 on my computer.
- It was good that one could test oneself and find out what one does not know. I consider it useful to continue in ongoing training with computer usage.
- It was an unnecessary burdening of employees at an unsuitable time and without appropriate motivation. People were also examined in things they do not actually work with.
- How nice and beneficial it would be if I could connect myself to the web and educate myself by means of distance learning! But with my PC W95 souped up with 32MB RAM?
- The project was implemented at an excellent level. All the necessary information was known in time. The demands of the tests were commensurate to the needs of computing technology usage

in public administration. The only thing I did not like was that some employees shrouded their incompetence (laziness) in unpleasant remarks directed against the project team.

- It was pretty good and I am grateful that I could be among the first to be tested.
- Testing computer literacy is currently an integral part of the portfolio of public administration employees working in both management, administrative and subsidiary positions.
- As regards the pilot project, I did not like the enlisting of employees for exams by the society information department. The date determined by you was not suitable for everyone, and misunderstandings originated when setting up exam dates, some employees were even forgotten about. I recommend for the future drawing out a sufficient number of dates. They would be available in one office and employees would select a date suitable for them (such a system functions at universities, where 100 students from various sections take the same exam).
- It is a good project and it would be good to continue in it, i.e. to allow employees to attend training courses for the advanced too.
- Since autodidactic study was necessary for meeting the required criteria in tests, I did not pay sufficient attention to learning. So I ended up like Napoleon at Waterloo.
- Exams just like any others, only in a non-traditional form, and that's good, otherwise it would have been embarrassing. Let's continue in this trend. Also introduced should be testing of other skills deemed necessary for our work. Lenin was right with his statement about learning; one can eventually become stupid without exercise.

Positives of Phase 3: Despite the busy end-of-year period, employees found time for their exams. Many workers would like to complete the remaining three modules, which the ministry management will make possible in 2005. We have acquired a large amount of stimulating information from employees which will facilitate improvement of the ECDL certification in the Slovak Republic.

Negatives of Phase 3: In a significant number of cases, even with younger employees, for whom we presume great motivation for education, we encountered unwillingness to learn and extend knowledge in digital literacy. Problems with both hardware and software occurred. Some participants were inattentive (e.g. although they received the precise address, specially created for this situation, where to send the required information, more than half of them sent it elsewhere). We encountered this problem throughout the project. Some employees complained that they could not choose modules they work with, although in the input questionnaire they were obliged to select modules according to their usage in their work and have the choice confirmed by a direct superior. The busy part of the year at the time of testing. Great resistance to any form of checking up skills in the case of the majority of employees and seeking excuses why it is not feasible.

## Conclusion

After the completion and evaluation of the pilot project at the mentioned institutions, the Civil Service Office and the Ministry of Transport, Post and Telecommunications of the SR will submit for discussion by the Government of the Slovak Republic a draft decree that will in a certain time frame (by the end of 2008) require every civil servant to acquire the ECDL certification. Every modern authority needs flexible officers effectively managing the tasks they are entrusted with. Only then will competent employees (officers), supported by high-quality information tools, master the required procedures in such a manner that customers (citizens) are satisfied with the service provided, while effectively using financial means.

## Contact

katarina.mandikova@telecom.gov.sk

## **INSPIRE and eGovernment**

*Eva Pauknerova, European Commission Joint Research Centre, Institute for Environment and Sustainability*

INSPIRE lays down general rules for the establishment of an infrastructure for spatial information in Europe to support: (i) environmental policies and (ii) policies that affect the environment. INSPIRE shall be based on infrastructures for spatial information established and operated by the Member States. The success of future implementation of the INSPIRE Directive will depend on the awareness and support by governments on national, regional and local levels. According to the INSPIRE proposal the infrastructure includes: metadata, spatial data sets and services; network services; agreements on sharing, access and use; coordination and monitoring mechanisms, processes and procedures. All these topics are important also for the eGovernment development. This pre-sentation aims to inform about the INSPIRE Work Program for 2005–2006 and participation in developing the INSPIRE Implementing Rules, turn attention to cross-references between the INSPIRE and eGovernment, and inform about the international workshop on INSPIRE and eGovernment organised by JRC and Czech Ministry of Informatics to be held in Prague on 28–29 April 2005.



## Accessibility as one of the aspects of quality websites

*Radek Pavlíček, Methodologist, specialist in usage of ICT by visually handicapped persons,  
Hana Bubeníčková, Head of the Methodological Informatics Centre,  
United Organisation of the Blind and Weak-Sighted of the Czech Republic*

At the present time, the internet is an extremely widely used means for acquiring and presenting information. One of the internet services that can be successfully used for this purpose is websites. However, not every web presentation to be found on the net meets this in full. The reasons vary—a website is difficult to use for its visitors, it cannot be found without a locator or is not accessible to all visitor groups. Accessibility has of late increasingly becoming the centre of attention.

An accessible website does not place any obstacles to its visitors. As regards websites of public administration institutions, accessibility should be a matter of course since the primary purpose of these websites is to provide information to all citizens without discrimination. In July 2004 the Ministry of Informatics of the Czech Republic issued a recommendation in the form of rules for creating an accessible website, which after the passage of the amendment to Act No. 365/2000 Coll. will become an implementing regulation to this Act. Accordingly, within a short time accessibility will be required by law.

### Basic theses of the paper divided into individual chapters

- What is an accessible website?
- Why have an accessible website?
- How do you create an accessible website?
- How do I find out whether my website is accessible?
- Blind Friendly Web—the first giant step towards accessibility

### What is an accessible website?

An accessible website is a website that does not place any obstacles to its users preventing them from effectively using the particular website. Accordingly, an accessible website takes into consideration:

- technical potentialities (internet browser, operating system, hardware);
- health indispositions (the blind, weak-sighted, colour-blind, dyslectic ...);
- temporary health indispositions (injuries of upper limbs);
- knowledge and education;
- temporarily deteriorated working conditions.

An accessible website does not only serve for physically handicapped visitors. An accessible website can also be better used by visitors with less common hardware and software, operating systems etc. When summing up all user groups with specific needs, these can be said to represent up to 30% of visitors to a specific website.

Since 2000, the issue of accessible websites in the Czech Republic has been dealt with by the Blind Friendly Web ([www.blindfriendly.cz](http://www.blindfriendly.cz)) project carried out by the United Organisation of the Blind and Weak-Sighted. Within the project, we provide:

- testing of websites in terms of accessibility to visually handicapped users;
- consultancy and training pertaining to accessibility of websites;
- the Blind Friendly Web portal with the Methodological Manual, a form for testing and plenty of further information about the issue of barrier-free websites.

Since 2003, also focused on website accessibility has been the advisory and consultancy centre Dobry Web (Good Web) ([www.dobryweb.cz](http://www.dobryweb.cz)).

## **Why have an accessible website?**

As regards public administration institutions, accessible websites should be a matter of course since these websites' primary purpose is to provide information to all citizens without discrimination. In the first half of 2004 a working group consisting of representatives of the Methodological Informatics Centre of the United Organisation of the Blind and Weak-Sighted (SONS), specialist consultants and employees of the Ministry of Informatics issued a document entitled Best Practice–Rules for Creating an Accessible Website. In July the Ministry of Informatics issued it as a recommendation for public administration webmasters which in the case of passage of the amendment to Act No. 365/2000, on information systems in public administration, will become an implementing regulation to this Act and, consequently, accessibility will be required by law.

## **Rules for creating an accessible website**

Czech rules for creating an accessible website comprise 37 regulations divided into six parts:

### **Website contents are accessible and legible**

- Every non-text element carrying a semantic message has its text alternative.
- Information communicated by means of scripts, objects, applets, cascade styles, images and other accessories on the part of the user is also accessible without any of these accessories.
- Information communicated by means of colour is also accessible without colour resolution.
- Foreground and background colours are sufficiently contrasted. In the background there is no pattern reducing legibility.
- Regulations determining the size of letters do not use absolute units.
- Regulations determining the type of letters contain the general family of characters.

### **Work with a website is controlled by the user**

- Contents of a website change only when the user activates a certain element.
- Without the user's direct command the website does not manipulate with the user environment.
- New windows are only opened in well-founded cases and the user is notified of it in advance.
- Nothing on a website blinks faster than once a second.
- A website does not obstruct the user in shifting frame contents.
- A website's content and its code do not presume and require a specific manner of usage, nor a specific output or control facility.

### **Information is intelligible and well-arranged**

- Websites communicate information in a simple language and an intelligible form.
- The home page clearly describes a website's sense and purpose. The website's name or its operator is obvious.
- A website and individual components of text content state their main message at the beginning.
- Extensive content blocks are divided into smaller, appositely headed units.
- Information made public on the basis of law is accessible as a website's text content.
- The actual web page contains a contact to the technical administrator and a declaration clearly defining the degree of accessibility of the website and its parts. Each page of the website refers to this web page.

### **A website's control is clear and understandable**

- Every website has a meaningful title according to its content.
- Navigation and content information are clearly divided on a website.
- Navigation is intelligible and consistent on all web pages.
- Every web page (besides the home page) contains a reference to a higher level in the website hierarchy and a reference to the home WWW page.
- All web pages of an extensive website contain a reference to the website's comprehensive map.

- Neither the content nor the code of a web page presumes that the user has already visited another page.
- Every form element has assigned an apposite headline.
- Every frame has an appropriate name or description expressing its meaning and functionality.

### References are distinct and instructive

- Designation of every reference appositely describes its objective even without the surrounding context.
- Identically designated references have identical objectives.
- References are differentiated from the other text, not only by means of colour.
- A picture map on the server part is used only in the case that it was not possible by means of an available geometric shape to define areas in the picture map. In other cases, a picture map on the part of the user is used. A picture map on the part of the server is always accompanied by alternative text references.
- The user is clearly notified in advance when a reference leads to content of a type different to that of a web page. Such a reference is supplemented by information about the type and size of the destination file.

### Codes are technically apt and structured

- Website codes comply with some published final specification of HTML or XHTML language. They do not contain syntactic mistakes which the website administrator is able to remove.
- Stated in meta-characters is the document font used.
- Elements forming headlines and lists are correctly marked out in the source code. On the contrary, elements not forming headlines or lists are not marked out in this manner in the source code.
- Style regulations are preferred for description of a website's appearance.
- If a table is used for laying out a website's content, it does not contain line and column headings. Conversely, all tables displaying tabular data contain headings of lines and/or columns.
- All tables make sense when read by lines from left to right.
- The complete wording of the rules is available at [www.micr.cz/files/1588/BP\\_web.htm](http://www.micr.cz/files/1588/BP_web.htm).

### How do you create an accessible website?

Creating an accessible website in the case that a webmaster takes accessibility into account as early as when setting it up is no more elaborate than creating an inaccessible version. The webmaster only has to know the accessibility rules and abide by them. In the environment of Czech public administration, it should be the above-mentioned Rules. If you want to familiarise yourself with these Rules and do not want to spend many hours self-studying, it is possible to acquire the required knowledge at trainings provided by the United Organisation of the Blind and Weak-Sighted ([www.sons.cz](http://www.sons.cz)) or Dobry Web ([www.dobryweb.cz](http://www.dobryweb.cz)).

If you do not create websites yourself and have them made upon order, require from the provider that the website created by him complies with accessibility rules and is produced using up-to-date methods (separation of information from appearance) serving to facilitate accessibility very much.

### How do I find out whether my website is accessible?

There are several manners of testing accessibility:

#### *manual check-up*

- advantages:
  - free of charge;
- disadvantages:
  - doubtful quality of results in dependence on the testing person's knowledge and exactitude;

- investing one's own time;

#### *automatic check-up*

- advantages:
  - free of charge;
  - results known immediately;
- disadvantages:
  - test results are in English;
  - automatic check-up does not detect all errors;

#### *audit by a specialist*

- advantages:
  - results are reliable;
- disadvantages:
  - usually paid for;
  - audit processing takes a certain amount of time.

If you really want to be sure that your website is accessible, have it tested by specialists. Accessibility testing is provided in the Czech Republic by:

- the United Organisation of the Blind and Weak-Sighted ([www.blindfriendly.cz](http://www.blindfriendly.cz))
- the advisory and consultancy centre Dobrý Web ([www.dobryweb.cz](http://www.dobryweb.cz)).

### **Blind Friendly Web—the first giant step towards accessibility**

Since 2000 the issue of accessible websites has been dealt with in the Czech Republic by the Blind Friendly Web ([www.blindfriendly.cz](http://www.blindfriendly.cz)) project implemented by the Methodological Informatics Centre of the United Organisation of the Blind and Weak-Sighted ([www.sons.cz](http://www.sons.cz)). The reason why blind and weak-sighted users are extremely interested in acquiring information from this source is independence from other persons' assistance during this activity. Existence of a host of barriers to reading and orientation on internet pages was the reason for the origination of the first Czech accessibility rules and the launch of this project's implementation.

Within this project, we provide:

- a basic test of websites in terms of accessibility for visually handicapped users;
- an extended test of websites to include a specific recommended solution;
- a user test of websites carried out by visually handicapped users;
- consultancy concerning website accessibility for the visually handicapped at the email [bfw@sons.cz](mailto:bfw@sons.cz)
- specialist training on the topic Creation of an accessible website;
- the Blind Friendly Web portal with the Methodological Manual, a form for testing and further information about barrier-free website issues;
- on the case of meeting the conditions of accessibility for visually handicapped users, inclusion of your website in the Catalogue of blind friendly websites on the Blind Friendly Web portal with the possibility of placement of the Blind Friendly Web sign on your website according to the degree of accessibility attained;
- BFW email discussion conference ([bfw@konference.brailnet.cz](mailto:bfw@konference.brailnet.cz))
- Additional data about us:
  - we are professional partners of the Golden Crest and Biblioweb competitions
  - awarded upon our proposal is the Prize of the Minister of the Interior for the best barrier-free website within the Golden Crest competition
  - among other things, we have also significantly contributed to the origination of timetables for the blind on the internet ([www.idos.cz/blind](http://www.idos.cz/blind))

In 2004, Blind Friendly Web was financially supported by the Ministry of Informatics of the Czech Republic.

## **Analysing Broadband Access for Rural Development, A-BARD project in the EU 6FP**

*Radziulis Pawel, Senior Consultant, ITTI Ltd.*

Analysing Broadband Access for Rural Development (A-BARD) is a Coordination Action to research rural broadband provision and use in the EU 6FP. A-BARD is a policy-orientated research study designed to identify the role of ICT as a driver of change in rural areas. It will undertake, inter alia, technology watch, rural typological mapping, case-studies, strategic and issues analysis. The project will both identify views on the issues and barriers to widespread ICT take-up in rural areas and identify follow through meaningful RTD research that should be conducted in this area. A-BARD project should be especially interested for rural groups, communities, local authorities, who are currently looking for information on broadband and more specifically for targeted information which relates directly to broadband issues / implementations for rural areas.

## Concept of the development of libraries in the Czech Republic for 2004–2010

*Vít Richter, National Library of the Czech Republic*

In July 2004 the Government adopted the “Concept of the development of libraries in the Czech Republic for 2004–2010” (hereinafter referred to as the “Concept”). Consequently, for the first time in their history Czech libraries have acquired a strategic development document approved by the Government. The basic draft of the new Concept was prepared by the Central Library Council, the advisory body of the Ministry of Culture for library and information services. In October 2002 discussion about it took place.

The Concept applies to more than 6,000 libraries providing public library and information services. It mainly concerns libraries operated by municipalities and towns, but the system also includes various networks of specialised libraries, among them university, museum and other libraries. The document sums up the major problems that Czech libraries face, proposes the manner of their solution, and determines responsibility for fulfilment of the tasks set down. In the introduction, it describes the present status of librarianship, libraries and information institutions, strengths and weaknesses, threats and opportunities. An important part of the material is also enumeration of the necessary financial costs that should be laid out in the next few years on libraries’ development within the framework of special grant programmes.

The Concept represents for libraries, their operators and founders, as well as regional authorities, an opportunity and challenge for influencing future development. At first glance, decisive for whether the stated goals will be really attained is primarily the volume of financing of libraries and grant programmes. On the other hand, the Concept cannot be fulfilled unless individual libraries and their operators strive to materialise the set objectives in the context of their services provided to users. The Concept should become first and foremost an incentive for drawing up partial strategic materials and supporting programmes at the level of regions, specialised networks and individual libraries.

The full text of the Concept, including annexes, is available on:

[http://knihovnam.nkp.cz/sekceno.php3?page=05\\_St/Policy04.htm](http://knihovnam.nkp.cz/sekceno.php3?page=05_St/Policy04.htm)

### Main objective of the Concept

To provide through the library system<sup>2</sup> the citizens with equal access to published documents and other information sources in any form. To create an information infrastructure for education and life-long learning, satisfy the cultural interests of the population, pursue research and development activities and participate in the economic activities of and independent decision making by individuals.

### Partial objectives of the Concept

#### A. Formation of the library system

1. To define, finalize, stabilize and develop the function of a structured and internally integrated system of libraries and resource centres which, using information technologies and irrespective of sector, region and specialization will lead to interconnection and cooperation among libraries, involving them in international cooperation, particularly within the EU.

- Deadline: Continuous
- Impact on the state budget: Specified in the table of grant programmes
- Cooperation of other ministries: Interaction of ministries, government agencies, AS CR and all libraries and their operators
- Regional dimension: Interaction of regions and municipalities

<sup>2</sup> § 3 para 1 of Act no. 257/2001 on libraries and conditions for operating public library and information services

- Recommendation: To include the cooperation of libraries with the concepts of the development of education, research, culture and to promote their interaction
2. To improve the legal regulation of the system of libraries and support its integration, coordination and cooperation functions through economic tools.
    - Responsible institution: MC by amending the Library Act
    - Deadline: 2006
    - Impact on the state budget: No impact on the state budget is expected
  3. To support interdisciplinary cooperation within the library system and build specialized libraries as guarantors of library and information services to individual disciplines.
    - Deadline: Continuous
    - Impact on the state budget: Included in the LPIS and Research and Development Programmes
    - Cooperation of other ministries: Interaction of ministries, government agencies and AS CR, particularly MEYS, MH, MA (linking the information flows of regional libraries to the regional resource centres focused on rural development and agriculture), Ministry of Environment, Ministry of Industry and Trade, Ministry for Local Development, Ministry of Transport
    - Regional dimension: Interaction of regions and regional libraries
  4. To achieve maximum compatibility and unification of library activities and systems on the national and international level, with the aim to improve the quality of services, increase the efficiency in the activity of libraries and eliminate duplication of activities and thus increase the economy of use of the public funds allotted for the activity of libraries.
    - Deadline: Continuous
    - Impact on the state budget: Included in the LPIS and Research and Development programmes and in the budget of ministries, government agencies and AS CR
    - Recommendation: To libraries, their operators and founders—to take cognizance of the criteria of compatibility and unification of library activities and systems when expending public funds on the activities of libraries
  5. To promote development of the activities of libraries by methodological and consultation activity.

#### **B. Equal access to public library and information services**

6. To create conditions for equal access to all types of published documents for the purpose of education, research, development and accessibility to cultural heritage with the simultaneous protection of intellectual property rights in compliance with the national and international regulations.
  - Responsible institution: MC by amendment to the Copyright Act
  - Deadline: 2004
  - Impact on the state budget: Payment for the licence to lend sound recordings in libraries has been included in the MC budget
  - Recommendation: To prepare an amendment to the Copyright Act in compliance with international conventions and recommendations, while creating space for the utilization of original works for the purposes of education, research and development and for providing access to cultural values
7. To set performance-based and qualitative parameters for the activities of libraries and PLIS with the aim of increasing their effectiveness. To ensure evaluation and control of these parameters.
  - Responsible institution: MC in cooperation with NL CR
  - MC will issue a methodological guideline on the standard for the operation of PLIS by municipalities and regional libraries that simultaneously function as basic libraries.
  - Deadline: 2004
  - Impact on the state budget: No impact on the state budget is expected
  - Cooperation of other ministries: Interaction of libraries in all sectors
  - Regional dimension: Interaction of regional libraries and evaluation and supervision of PLIS standards presupposes an interaction on the part of the of Ministry of the Interior, regions and municipalities

- Recommendation: To optimize the monitoring of statistical data on the performance of libraries of all types, to ensure their interrelation (in cooperation with the National Resource and Consultancy Centre for Culture and the Institute for Information in Education)
8. To continue with the implementation of the regional functions of libraries and to develop regional systems of libraries on the basis of the principle of cooperation among all the libraries in each region, in order to achieve a standardized level of PLIS, including information service to PLIS users—the population of small municipalities.
- Responsible institution: Region
  - Deadline: Continuous
  - Impact on regional budgets: By amendment to the Act on budgetary allocation of certain tax revenues to local self-governing units and to certain government funds no. 243/2000 Coll.
  - Recommendation: MC will issue a methodological recommendation for the execution of regional functions
9. To connect all libraries operated by public administration to the Internet by means of the public administration communication infrastructure, and thus extend the availability of publicly accessible Internet stations especially in small municipalities in the Czech Republic.
- Responsible institution: MI in cooperation with MC pursuant to Resolution of the Government CR of 14. 1. 2004 č. 44
  - Deadline: 2006
  - Impact on the state budget: Included in the LPIS programme and the MI budget within the Communication infrastructure of the public administration information systems
  - Regional dimension: Presupposes an interaction of regions and regional libraries
  - Recommendation: To use the EU structural funds for the internetization of libraries
10. To improve the information infrastructure and the level of equipment in libraries with information and communication technologies. To provide access to the scientific research networks for libraries wherever appropriate.
- Responsible institutions: MC, MI in the field of ensuring Internet connectivity
  - Deadline: 2006
  - Impact on the state budget: Included in the LPIS programme and the MI budget within the Communication infrastructure of the public administration information systems
  - Cooperation of other ministries and institutions: MC, MEYS, MH, MA, AS CR, universities
  - Regional dimension: Presupposes an interaction of regions and regional libraries
11. To improve the role libraries play in the process of lifelong learning. To support the availability of services and funds for learning through the Internet in libraries. To create in libraries multimedia multifunction centres, making available training and facilities for working with digital documents, to make these services also available to the population in small villages.
- Responsible institutions: MC, MEYS
  - Deadline: Continuous
  - Impact on the state budget: Included in the LPIS programme
  - Cooperation of other ministries: MEYS, Ministry of Labour and Social Affairs, Government Council for Human Resource Development
  - Regional dimension: Programmes are open also to libraries operated by regions and municipalities
  - Recommendation: To make the results and products used in schools within the implementation of the state information policy in education available to libraries for their own activities.
12. To support and extend the cooperation of libraries in the sharing of information sources and services with the aim to provide users with the possibility of search of and access to the maximum of published information and information sources both in the domestic and the international information networks, either through direct contact with the library or through the Internet. To support accessibility of on-line library catalogues on the Internet. To optimize the organization of inter-library services.
- Responsible institutions: NL CR, the Moravian Regional Library in Brno, regional libraries, specialized libraries



- Deadline: Continuous
- Impact on the state budget: Included in the LPIS programme and in the Research Information Infrastructure programme
- Cooperation of other ministries: Interaction of libraries of all sectors
- Regional dimension: Interaction of libraries of all regions and municipalities
- Recommendation: To develop inter-library services pursuant to the Library Act no. 257/2001 Coll.

13. To improve the accessibility of libraries and their services, to remove barriers hampering access to their services, to provide library services to the handicapped and to the ethnic minorities, the unemployed and other disadvantaged social groups.

- Responsible institutions: Libraries and their operators
- MC will prepare a new supporting „Easy-Access Library“ programme or amend the content of existing programmes
- Deadline: 2004
- Impact on the state budget: Included in the Library of 21<sup>st</sup> Century programme or the new supporting Easy-Access Library programme
- Regional dimension: The Programme will also be open to regional and municipal libraries
- Recommendation: Libraries and their operators support the availability of services and the removal of the existing barriers

14. To create the prerequisites for making information education possible for users, in order to increase their functional literacy and their ability to search information sources and use them effectively. To include information education (information literacy) in the curricula of primary and secondary schools. To use libraries for teaching the elementary computer and information literacy to the citizens.

- Responsible institutions: MEYS–implementation in teaching, MI–realization of the National Computer Literacy Programme
- Deadline: Continuous
- Impact on the state budget: Included in the MI budget
- Recommendation: To support the cooperation of libraries and schools in the teaching of information literacy

15. To use libraries for e-government services. To develop new library services for the provision of information pursuant to Act no. 106/1999 Coll., on free access to information, to support through libraries the public's electronic access to the public administration information systems. To incorporate libraries in the communication strategy of the Czech Republic, relating to its entry into the EU, through the cooperation of libraries with the Ministry of Foreign affairs and the EU resource centres in the Czech Republic, and in particular present the information thus acquired to the public.

- Responsible institution: MC in the form of the support for the LPIS programme
- Deadline: Continuous
- Impact on the state budget: Included in the LPIS 3 programme
- Cooperation of other ministries: MI, MA, Ministry of Interior, Ministry of Labour and Social Affairs, Ministry of Environment, Ministry of Foreign Affairs, Ministry for Local Development
- Regional dimension: Interaction of regions and regional libraries
- Recommendation: To support the role of the library as the resource centre of the municipality

16. To support, through the community activities of libraries as PLIS providers, the active involvement of citizens in the life of the community, to help create local partnerships and build communities in the given location. To create in libraries adequate space for community and cultural activities.

- Responsible institution: MC in the form of support for the Library of 21<sup>st</sup> Century programme
- Deadline: Continuously
- Impact on the state budget: Included in the Library of 21<sup>st</sup> Century programme
- Cooperation of other ministries: MA, MEYS, Ministry for Local Development, Ministry of Interior
- Regional dimension: The Programme may be used by libraries in cities and municipalities

17. To improve substantially the conditions of libraries in terms of the size and quality of space, to support library construction and reconstruction, focusing on the improvement of library services. To construct and reconstruct the facilities of NL CR and the National Technical Library. To replace the provisional space arrangement at the regional libraries in Ostrava, Karlovy Vary, Havlíčkův Brod and Zlín with such facilities that allow the appropriate functioning of a regional library. To initiate a new grant programme focused on the support for construction and reconstruction of libraries.

- Responsible institutions: The respective operators of libraries and MC
- Deadline: Continuous
- Impact on the state budget: to be included in the documentation relating to asset replacement programmes
- Cooperation of other ministries: MEYS, MH, MF, regions
- Regional dimension: Interaction of the respective regions
- Recommendation: MC supports the construction and reconstruction of libraries

### **C. Creation and processing of library collections and information sources**

18. To increase the volume of financing for the purchase of library collections at the libraries of the Czech Republic and thus create the basic prerequisite for the improvement of the PLIS content and quality.

- Responsible institutions: Library founders and operators, MC by means of supporting programmes
- Deadline: Continuous
- Impact on the state budget: included in the Czech Library and Library of 21<sup>st</sup> Century programmes
- Cooperation of other ministries: Interaction of libraries in all sectors
- Regional dimension: Interaction of regions and regional libraries
- Recommendation: Library founders and operators will ensure increased financing for the purchase of library collections in compliance with user needs

19. To ensure continuity of access to electronic information sources for research, development and education, and its proper updating. To support the creation of consortia for purchasing and obtaining electronic information sources, to cooperate with publishers and distributors when negotiating licences.

- Deadline: 2004 and then continuous
- Impact on the state budget: Included in the LPIS 8 programme and in the Research Information Infrastructure programme
- Cooperation of other ministries: MEYS, AS CR, MH, MA
- Regional dimension: The programmes are open also to regional libraries
- Recommendation: To monitor continuously the efficiency of the utilization of electronic information sources and optimize their selection in compliance with user needs

20. To expedite the conversion of library catalogues from card-index to on-line databases, thus providing Internet access to library collections even to remote users, and multiple use of electronic entries at the Czech Republic's libraries.

- Responsible institution: MC in the form of support for the LPIS programme
- Deadline: Continuous
- Impact on the state budget: Included in the LPIS 5 and 9 programmes
- Regional dimension: The programme is open also to regional libraries
- Recommendation: To give all libraries access to the data thus created

21. To build electronic cumulative catalogues and information gates which will act as the basic information guides to the availability of documents in the libraries of the Czech Republic and as tools for shared cataloguing.

- Responsible institution: MC in the form of support for the LPIS programme
- Deadline: Continuous

- Impact on the state budget: Included in the LPIS 3, 5, 8, 9 programmes and in the Research Information Infrastructure programme
- Regional dimension: The programmes are open also to regional libraries
- Recommendation: To create in libraries conditions for shared cataloguing, to support cooperation with cumulative catalogues and to integrate databases thus created into the information gates

#### D. Protection and accessibility of the cultural heritage

22. Improvement of the quality of the current and retrospective bibliographic registration, long-term preservation and accessibility of documents published in the territory of the Czech Republic, including the so called grey literature and selected types of electronic documents. Support for the development of tools that ensure the quality and completeness of information relating to the documents published in the territory of the Czech Republic.

- Responsible institution: Ministry of Culture in the form of support for the LPIS programme
- Deadline: Continuous
- Impact on the state budget: Included in the LPIS 3 and 5 programmes
- Cooperation of other ministries: MH, MEYS, Ministry of Interior and other
- Regional dimension: Interaction of regional libraries
- Recommendation: To improve the interaction among NL CR, the Moravian Regional Library in Brno, regional libraries and specialized libraries in the processing of the current and retrospective national bibliography of published documents

23. To prepare a concept of long-term preservation of library collections of traditional and electronic documents in the libraries of the Czech Republic as an important component of the cultural heritage and render them accessible to the present as well as future generations. To create the legislative, organizational and technical prerequisites for the gathering, long-term preservation and accessibility of published digital and digitized documents as an important component of the cultural heritage.

- Responsible institution: MC, NL CR
- Deadline: 2005
- Impact on the state budget: To be included in the ready concept
- Cooperation of other ministries: Cooperation is planned with the most significant libraries from all sectors
- Regional dimension: Interaction of regions and regional libraries

24. To continue with the digitization of selected parts of library collections as an integral part of the cultural heritage, and make them accessible to the public.

- Responsible institution: MC in the form of support for the LPIS programme
- Deadline: Continuous
- Impact on the state budget: Included in the LPIS 4, 6 and 7 programmes
- Regional dimension: The programme is open also to regional libraries

25. To improve the organizational and technical readiness of libraries to handle emergency situations in the event of natural disasters and danger of war. To process the methods of how to form plans for dealing with emergency situations at libraries.

- Responsible institutions: MC, libraries, their founders and operators
- Deadline: the methodology in 2005, the implementation supported from the ISP programme from 2006 on
- Impact on the state budget: Included in the ISP programme
- Cooperation of other ministries: Interaction of libraries of all sectors
- Regional dimension: Interaction of regions and regional libraries, municipalities
- Recommendation: Libraries and their operators will revise their library emergency plans, in libraries in order to update or amend them with regard to all known types of threat to collections, buildings, staff and visitors

26. To develop cooperation of libraries and museums, archives and other types of memory institutions in the processing, protection of and accessibility to of the cultural heritage, with emphasis on the in-

roduction of new information technologies and the compatibility of systems. To prepare new programmes for the support of the use of information technologies focused on different types of memory institutions; the results to be presented jointly.

- Responsible institution: MC
- Deadline: 2005
- Impact on the state budget: To be included in the prepared programme (in the new Research and Development for Libraries programme) and in the MC budget
- Cooperation of other ministries: Ministry of Interior
- Regional dimension: Planned interaction of regions and regional libraries
- Recommendation: To use the existing LPIS 5, 6, 7 and 9 programmes for supporting the cooperation of memory institutions, the Czech Museums programme

27. To propose a systemic solution to the protection of historical library collections with regard to their handling and the solving of the manner of their export.

- Responsible institution: MC
- Deadline: 2006
- Impact on the state budget: none
- Recommendation: to resolve the status of historical library collections either by making them subject to the existing legislation or by amending to the Library Act.

### **E. Human Resource Development**

28. To ensure professional training and lifelong learning of library staff, with emphasis on the acquisition of knowledge and skills for the use of information and communication technologies, and linguistic skills. To increase the role of library schools in providing lifelong learning to library staff. To continue with the development and extension of the specialist curricula of learning centres at libraries.

- Responsible institution: MEYS, learning centres in libraries
- Deadline: Continuous
- Impact on the state budget: Support for learning centres of libraries included in the LPIS 2 programme
- Cooperation of other ministries: MC, MH
- Regional dimension: Planned interaction of regions and regional libraries
- Recommendation: Libraries and their operators will support lifelong learning among library staff

29. In the context of increasing demands placed on the library and its information activity, to review library staff salaries and put through an adequate job classification system for library staff according to the new job catalogue. To interrelate the lifelong learning system with the system of remuneration.

- Responsible institutions: Libraries and their operators
- Ministry of Labour and Social Affairs will prepare, in cooperation with MC job descriptions of library professions as a basis for the career system.
- Deadline: 2004 and then continuous
- Impact on the state budget: Included in the budgets of individual libraries
- Recommendation: Librarianship societies and associations will start to develop a career system for the staff of selected types of libraries. Libraries and their operators will prepare and apply the career system.

# An European Model of Charter of eRights

*José Ramón Rodríguez, CIO Barcelona City Council*

## The presentation will address the following issues:

- What is behind the adoption of the Charter of eRights?
- What is the rationale behind the will to draft an European Model of the Charter of eRights?
- How the EURO CITIES Knowledge City forum working group of European cities experts will contribute to the effective recognition and implementation of eRights among European Cities?
- How Barcelona signing process spreads awareness on Information and Knowledge Society issues at local policy level?
- How to build up synergies between the Declaration on Local and Regional Information Society and the Charter of eRights developments in order to join efforts around a common vision at European level and vis-à-vis European Institutions?

## What is the Charter of eRights?

- Developed by the EURO CITIES Knowledge based society forum during the year 2004, The Charter of Rights of citizens in the Information Society aims to be the European model from which local elected governments can draw up their own municipal Charter and fix their own ways of reaching a sustainable Information and Knowledge Society in their local area.
- In this sense, committing to the Charter of eRights of citizens in the Information and knowledge Society essentially signifies the adherence to the idea that local public administrations must progressively guarantee to all citizens the specific individual and social rights in the field of the Information and Knowledge Society in order to fight digital and social divide but also to help building up better local governance.

## The Rationale...

- Due to the recent impact of IST inside governments organizations and the necessary shift from industrial economic model to knowledge and communication one, municipalities face the great challenge to think of new growth strategy and need to think over the scope of its actions, role, duties and limits in this field.
- Local decision-makers and politicians are extremely sensitive to the common framework of local authorities areas of responsibilities (Democratic, promotional and regulatory functions). This legal framework provides the basis to find out how far cities can go in the local development of the Information and Knowledge Society (IKS) and what are the limits of its actions on the basis of their legal obligations and power limitations.
- The framework of the Charter of Rights of citizens in the Information Society aims to be the European model from which local elected governments can draw up their own municipal Charter and fix their own ways of reaching a sustainable Information and Knowledge Society in their local area.
- The Charter articles should be then complemented by a proposal of specific indicators which will provide a first common guidance to local authorities on assessing the level of enforcement of individual rights and the effective application of newly developed public services.
- A compilation of TeleCities members' projects which effectively guarantee and protect one or more rights identified in the Charter finally illustrate what is already being and could be undertaken by members cities in order to progressively ensure the guaranty of the eRights.

## **TeleCities Working Group**

During 2004, TeleCities set up the working group on “The Charter of Rights of Citizens in the information Society” led by the City of Barcelona. The 3 thematic sessions have initiated a debate on the objectives of such a Charter but have also allowed to fix the contents and determine the necessary level of commitment to bring together as many cities as possible around a common Framework.

In this sense, a main conclusion of the working group 2004 is that committing to the Charter of eRights of citizens in the Information and knowledge Society should essentially signify the adherence to the idea that local public administrations must progressively guarantee to all citizens the specific individual and social rights in the field of the Information and Knowledge Society in order to fight digital and social divide but also to help building up better local governance.

In 2005, Barcelona will continue to lead the working group. The work will focus on the launching and give the maximum support to the Signing Process amongst the Knowledge Society Forum members cities. In parallel to this important step for spreading the Charter impact radius, the working group will continue working on a deeper listing of common European indicators linked to the Charter article.

As former President of TeleCities and leader of the working group on The Charter of eRights, Barcelona has been the first member city approving the Charter.

Barcelona Plenary Council signed the Charter of Rights of citizens in the Information and Knowledge Society during the Plenary session last friday 18th of March 2005. As former President of TeleCities and leader of the working group on The Charter of eRights, Barcelona has been the first member city approving the Charter last march 2005. During the signing process, the city adapted the european model of the charter to its needs and local context. For instance, as an important step forward to implement effective electronic administration, Barcelona defined and included the right for citizens to address the public administration by electronic means and to be answered by electronic means.

## PRELUDE Challenge—continuation of the initiative with the participation of newly acceded regions

*Václav Sedláček, Rector of the West Moravian University Třebíč, o. p. s., Czech Republic*

The paper aims to acquaint readers with the intentions of the PRELUDE Challenge consortium during the introduction of research and development results in practice, primarily in the ICT sector in the area of public administration in the wider concept of this term, as is set down in official documents of the EU Commission.

### History and present

In 2003 representatives of 9 regions of EU member states and the ELANET and ERIS@ companies signed the memorandum on establishing the PRELUDE<sup>3</sup> consortium. They pledged future cooperation as a support body for the Fifth Framework Programme.

PRELUDE Challenge links up to this initiative. The opening session of the original 9 “old” and 11 “new” partners, which was at the same time a meeting evaluating the previous initiative, was held in September 2004 in Brussels. The Vysočina region is the only region in the Czech Republic represented in the newly established association. A new organisational and control structure has been created and approved. Within its framework, the Scientific Committee for Innovation and Research (SIR) has been set up from representatives of university communities from member states. It is an advisory authority of the steering committee. Its introductory session took place on February 17 and 18, 2005 in Brussels.

Information about the consortium and outputs from individual working parties can be found at [www.prelude-portal.org](http://www.prelude-portal.org). It is also possible to find here (also in the sense of SIR’s decision of February 2005) a reference to the up-to-date documentation of PRELUDE Challenge.

### Objectives of the consortium

A pivotal material, stipulating and streamlining the activities of the consortium’s individual components, is the respective guideline of the European Commission<sup>4</sup>. The initiative aims to support the consortium members, which are perceived as developing regions. To attain the objectives set out, the steering committee adopted the Action Plan.

As regards implementation of ICT into the activity of institutions and authorities of regions, companies and associations, the situation in the Vysočina region is very similar to that in other regions of the Czech Republic. Hence, the knowledge and experience gained can be successfully applied in other regions too. This can be illustrated, for example, by a case study on public administration in the Vysočina region that has been published in official PRELUDE documents<sup>5</sup>.

### Working parties

The core of activities is currently carried out in 6 working parties (WP1–WP6).

The first working party, WP1 Activities of European Clusters, includes newly redefined clusters with the aim to create a structure that will highlight technological aspects and ensure full integration of new partner regions.

On the basis of the final evaluation of current results of the PRELUDE consortium, activities have been newly regrouped into 4 vertical and 3 horizontal thematic clusters:

---

<sup>3</sup> Promoting European Local and Regional Sustainability in the Digital Economy

<sup>4</sup> “Science and Technology, the key to Europe’s future—Guidelines for future European Union policy to support research”, COM (2004) 353 of 16/6/2004.

<sup>5</sup> See, for example, Claudio Di Giorgio et al: Research and Innovation for Sustainable Regional Development—A Guide for Regional Policy Makers, p. 104.

- GAUDI European Cluster for Innovation in eGovernment

Their implementation, i.e. the digital divide between European regions and ensuring eInclusion within these communities.

For the sake of completeness, it is necessary to include in the above-mentioned enumeration activities in the The objective is cooperation in eGovernment aimed at support and extension of possibilities of public services, highlighting participation in political decisions and improvement of communication with citizens. Three tools for attaining the set intentions have been approved: use of new technologies, changes in management methods and promotion of new practices in public organisations (doing things correctly versus doing correct things).

- EDEN Enterprises in Digital Economy

The task is to support through ICT means (attained as a result of research and development) small and medium enterprises (SMEs) via the European network of “key players”.

- ETTC European Transport and Telematics Cluster

It is a platform for integration of research and development results and a medium for sharing technological means and discussion of tasks for solutions leading to the provision of future tools for use in eTransport.

- MobiCiti Mobility of Citizens

Support of transformations in progress, resulting in rapid changes in the method of work, provision of new means for training and knowledge acquisition, provision of information according to the needs of individuals and their professional orientation.

- Learning and Knowledge Creation a cluster for education, knowledge, research and innovation

This horizontal cluster is focused on creating a “community for practice” between individual member regions for regional research and innovations pertaining to public administration, building up of capacities for subjects of public administration, industry and research, formulation of methodologies for training and education and their applications.

- FLOSS Free Libre Open Source Software cluster

This horizontal cluster provides support for the previous “vertical” clusters within the framework of the consortium in assistance with tackling problems with using software of the mentioned type.

- GUARANTeE to guarantee eInclusion for member regions

The task is the creation of visions, plans, and sixth working party–WP6 eParticipation.

## **Second working party–SIR**

The Committee consists of representatives of academic workplaces of the consortium’s member regions. The following activities have been stipulated for it in the Action Plan:

- Mapping of requirements for innovations and research within member regions;
- Promoting exchange of experience and best practices in the field of science, innovation and research, with special focus on ICT use by various parts of the public sector;
- Advisory body of the steering committee;
- Evaluation of the effectiveness and outputs of projects and assessment of their impact in regions;
- Provision of methodological support for improvement of communication and support for science, innovation and research, with special emphasis on the role of ICT;
- Raising the awareness of the relevance of applying science and research results among leading politicians (political leaders) and public administration authorities at all levels (in the form of discussions and special presentations).

The Committee’s approved documents will be placed on the portal whose address is stated above.

## **Sixth working party–eParticipation for improved local and regional government**

The consortium’s Action Plan for this working party has set out the following vision:



- eParticipation is the extension and transformation of participation in sociological democratic and consultation processes using means of information and communications technologies (ICT), primarily the Internet.

	Inter-operability	Multi channelling	Broadband expansion	Open source	Pan-European services	Usability	Identity management	Bench-marking	Good practice
<b>e-democracy</b>									
<b>e-voting</b>									
<b>e-hearing</b>									
<b>e-consultation</b>									
<b>e-community</b>									
<b>e-inclusion</b>									
<b>e-petition</b>									
<b>e-governance</b>									
<b>e-collaboration</b>									
<b>e-community decision making</b>									
<b>e-campaigning</b>									
<b>e-lobbying</b>									
<b>e-activism</b>									
<b>e-accessibility</b>									
<b>m(obile)-participation</b>									

Picture 1 for eParticipation–taken over from the Action Plan

Accordingly, the adopted vision sets as its objective bridging the barriers between the citizen and public administration, while broadly using ICT means as the base for other information society components.

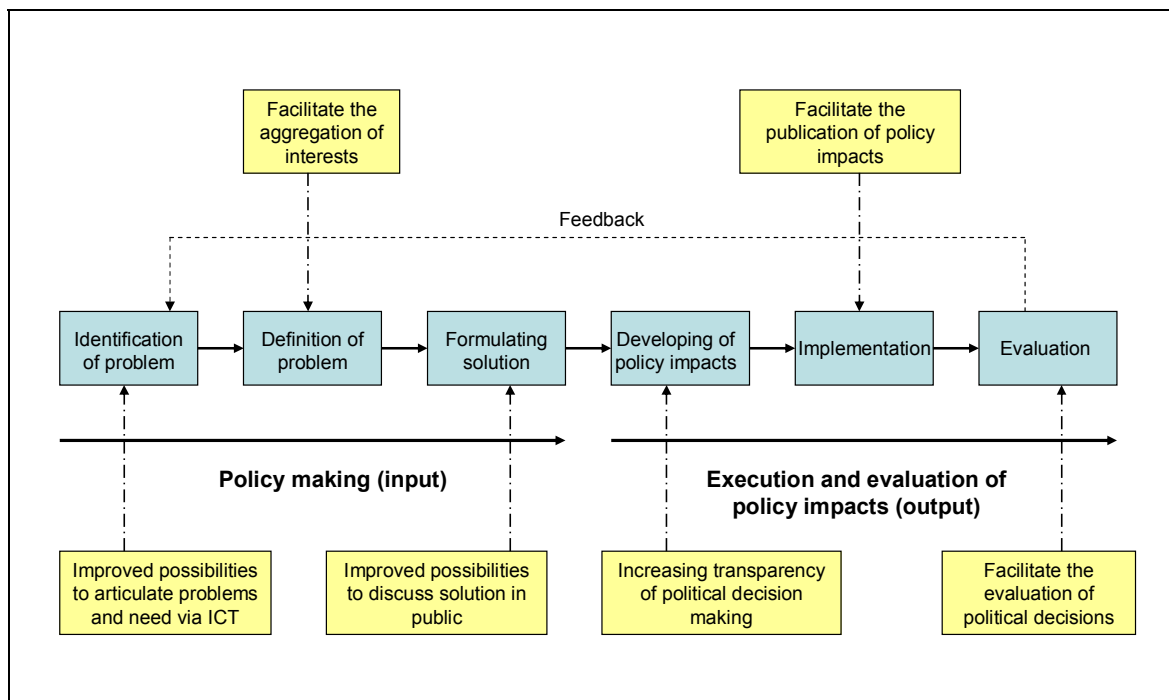
It concerns a naturally multidisciplinary scientific-research activity that may be characterised as an intersection of the following disciplines:

- public administration;
- political sciences;
- information systems;
- communications;
- informatics.

Activities of this working party will link up to the previous PRELUDE results and outputs, for instance, the consortium’s attained organisational structure, support for the international platform using three European networks which at present interconnect approximately 100 large European cities, the synergic effect of 7 clusters, inclusion of industrial partners etc. For the purpose of meeting the set goals, a group of 200–250 European scientific workers will be established with the aim of planned and sustained research in the given area over the next 4–5 years. Of course, this group is also open to workers outside the mentioned 20 member regions. Participation of researchers from, for example, the USA, Canada and Switzerland, is presumed. The aim is to create an NoE (Network of Excellence).

For setting out other working methods (see Picture 1), a matrix of themes has been drawn up and approved. It is the basic means of navigation when planning future research activities.

The scheme of presumed working methods pertaining to eParticipation is shown on Picture 2.



Picture 2 Presumed working methods for eParticipation–taken over from the Action Plan

**Conclusion**

The provided outputs will evidently have a wide range according to the adopted plans, and thus are going to influence both the public and private sectors, as well as working methods for companies and individuals. As regards authorities and organisations, they can be a useful source of information and inspiration during fulfilment of objectives and intentions that are anchored not only in official EU<sup>6</sup> documents, but also in other binding documents and recommendations. Consequently, it is apparent that the offered outputs will not only affect regional authorities but, most probably, also the methods and approaches of central authorities at the level of the republic.



<sup>6</sup> For example, the document e-Česko 2006: Information Society for All.

## eCitizenship for All project–LORIS, IT benchmarking for cities of the Czech Republic

*Jaroslav Šolc, Renata Tomanová, Informatics Department, Prague City Council,  
Václav Řepa, School of Economics in Prague*

Upon the instigation of the Capital City of Prague and in cooperation with the Union of Towns and Communities of the Czech Republic, a survey has been carried out mapping the state of informisation of public administration in corporate towns of the Czech Republic. The survey links up to the project of the organisation TeleCities and the company Deloitte entitled eCitizenship for All–survey and award carried out in European cities, and also the LORIS survey launched within last year's ISSS/LORIS/V4DIS conference in connection with the eV4/LORIS Declaration. The paper brings information about the context, methodology and course of the project in 2004, whose final report will be issued shortly after the conference.

### Introduction

The eCitizenship for All–survey and award project is a joint activity of the organisation TeleCities and the company Deloitte aimed at mapping the status and ensuring exchange of European cities' experience pertaining to information society development. The project has two parts: a comparative survey (benchmarking) and a competition among projects (award). Both the survey and the competition took place last year for the second time. Participating in the first year, 2003, were 3 cities from the Czech Republic: the TeleCities members Prague and Ostrava, as well as Hradec Králové. The project and its results were also presented at the ISSS/LORIS 2004 conference. The final report for 2003 is available at the address:

<http://www.deloitte.com/dtt/research/0,2310,sid%253D37085%2526cid%253D44100,00.html>

The ambition of the 2004 project was, among other things, to include in the survey a larger number of cities, primarily from the new EU member states. The specific intention is the drawing up of a national study evaluating the situation on the basis of data from a larger number of cities from one country. The Capital City of Prague, a member of the TeleCities steering committee, in cooperation with the Union of Towns and Communities of the Czech Republic (SMO ČR), undertook this intention and in September 2004 initiated the drawing up of a study for corporate towns of the Czech Republic. Also dealt with was the linkage to the Czech Republic's activities marked by the abbreviation LORIS (see below). Over the next few years, a similar study should be carried out in other new EU member states (for example, V4).

### Methodology and collection of basic data

The idea of drawing up a comparative study mapping the level of development of informatics and eGovernment in the Czech Republic's cities and contributing to the involvement of other cities in the eCitizenship for All project originated back in the first quarter of 2004. The intention received its specific form in August, following the agreement between representatives of TeleCities, Deloitte, the Capital City of Prague and the Union of Towns and Communities of the Czech Republic. They decided that the target group would be corporate towns of the Czech Republic and that the study would be elaborated on the basis of two types of input information: the eCitizenship for All on-line database and a LORIS questionnaire.

### eCitizenship for All

A TeleCities and Deloitte project, survey in EU cities, focus on 4 thematic groups according to the original TeleCities working parties: Re-engineering, eDemocracy, eSecurity, eLearning. The survey's detailed results serve as the groundwork for creating a knowledge database available for on-line participants. The participants filled in forms on-line (one general and 4 detailed) in a specific application

for which they received access rights on the basis of confirming their interest in participating in the project. The forms are quite extensive, having a total of 30 pages in the printed form.

Alongside the comparative survey, the project also entails evaluation of projects applied by cities for a competition (for TeleCities members only). The results are announced at an annual conference; for 2004 at the TeleCities/Eurocities conference in Vienna (November 2004). The competition's principle was not applied in the project for the Czech Republic's cities.

## **LORIS**

Meant under this designation is an eStrategy and IT Profile questionnaire that originated within the framework of activities of last year's ISSS/LORIS V4DIS conference in connection with the eV4/LORIS Declaration on Local and Regional Information Society Development. The questionnaire was prepared in 2 variants: for cities and for associations of self-governments. In the form of a structured document (MS Word), it requires basic data about the city, the IT organisation in the city, conceptions, infrastructure, SW agendas and data, development of eGovernment and CRM, cooperation with other subjects etc (approximately 4 pages).

At the beginning of 2004 model examples of questionnaires for Prague and the Union of Towns and Communities were elaborated. Other partners (mainly from Central and Eastern European countries) were invited to draw it up; the results of the 1st phase were presented within the conference in March 2004. Besides using it for a survey in corporate towns of the Czech Republic, the 2nd phase of distributing the Declaration and the questionnaire to foreign partners began at the end of 2004. Cooperation with the Global Cities Dialogue and other organisations in this matter is under negotiation.

Inviting cities to participate in the project was formulated in a common letter by O. Vlasák, the Chairman of the Union of Towns and Communities of the CR, and P. Bém, Lord Mayor of the Capital City of Prague, dated 18.8.2004. Deloitte's Prague branch launched communication with city managements. The Informatics Department of Prague City Council (INF MHMP) was in working contact with delegated workers for individual cities that applied for participation in the project (14 out of 20 corporate towns). INF MHMP employees, together with TeleCities and Deloitte workers, provided technical methodological support for drawing up of eCitizenship questionnaires and/or their transfer into the database (in English, on-line). Furthermore, they collected LORIS questionnaires drawn up by participants, using the model example for Prague. Also used were questionnaires elaborated by some cities back in the first quarter of 2004 within the previous conference.

The closing date for collection of basic data was prolonged from the original deadline of the end of 2004 (eCitizenship, for non-members of TeleCities) until the end of January 2005. By this date, data from a total of 13 corporate towns had been acquired. The fact that most of the cities addressed assumed a welcoming approach to the project and that the accountable staff worked up the required questionnaires should be assessed extremely positively, and all participants deserve acknowledgement. A general overview is shown in the table.

Acknowledgement to the Czech Republic's cities was also expressed at the session of the TeleCities steering committee in January 2005 in Liverpool, where further procedure of the eCitizenship for All project in a pan-European context was discussed too.

## **Evaluation and presentation of results**

In February 2005 the phase of control and evaluation of the data collected began, primarily the preparation for the drawing up of the final report. In addition to evaluation of the results acquired on the basis of the two types of questionnaires from 14 cities, the report will also contain framework information about the conception and organisation of informatics in public administration in the Czech Republic, especially in the self-government context.

At the time this text was being written, work on evaluation of results was in full swing. Initial knowledge will be presented at the ISSS/LORIS/V4DIS conference. More detailed results will be available in the second half of April. A study for the Czech Republic will be presented in linkage to the summary eCitizenship for All - European Benchmarking Report 2004 at the TeleCities conference

in Tallinn (20–22.4.2005). Scheduled for May is distribution of the report for the Czech Republic in Czech. Subsequently, it will be translated into English and distributed abroad.

**Initial knowledge**

On the basis of preliminary evaluation of LORIS questionnaires, drawn up by V. Řepa (School of Economics), it can be stated that in compliance with expectations the following knowledge, or experience and lessons learned, has been confirmed and documented:

- The necessity of a conceptual approach to both ICT development in cities (drawing up of strategies affected, among other things, by the requirements for attestations pursuant to the law on IS in public administration) and IT organisation within authorities and cities.
- The necessity of defining priorities and support on the part of cities’ political management. New challenges for IT development in the direction of effective internal operation and provision of services to citizens.
- The importance of edification and education (both in public administration and in the direction towards citizens), the importance of advertising new services.
- The necessity of using project management methods, quality analyses, securing financial sources (including multi-source financing).
- The necessity of developing other transaction services, implementing the multi-platform approach, paying greater attention to security issues.
- To date, eLearning, use of Open Source SW has been applied only to a very limited extent.
- The importance of cooperation and experience sharing, reserves pertaining to involvement in international cooperation etc.

**Conclusion**

The project carries out an interesting probe when it comes to learning the state of information society development in selected cities in the Czech Republic. Cities are a prime instigator of development in eGovernment not only in the Czech Republic, but anywhere worldwide. The 13 cities participating represent a sample of self-governments comprising more than one-third of the Czech Republic’s population. The authors believe that the study will not only serve to enhance knowledge exchange between Czech cities, but also contribute to deepening effective cooperation at the international level. Identification of problems and challenges, comparison with current trends, alignment of various approaches to their solving, as well as promotion of successful solutions for inspiration of others, are pivotal principles of beneficial cooperation between self-governments.

**Table: Overview of corporate towns of the CR and their participation in the project in 2004**

(listed according to population, status as of 1.1.2004, Czech Statistical Office)

City	Population	Region	eCitizenship	LORIS
Prague	1,165,581	Capital City of Prague	+*	+*
Brno	369,559	South Moravia	+	+
Ostrava	313,088	Moravia-Silesia	+*	+*
Pilsen	164,180	Pilsen	+	+
Olomouc	101,268	Olomouc	0	0
Liberec	97,770	Liberec	+	+*
České Budějovice	95,245	South Bohemia	+	+*
Hradec Králové	95,195	Hradec Králové	+*	+*

Ústí nad Labem	94,105	Ústí nad Labem	(+)	+
Pardubice	88,741	Pardubice	+	+
Havířov	84,914	Moravia-Silesia	0	0
Zlín	79,177	Zlín	+	+
Kladno	70,003	Central Bohemia	+	-
Most	67,905	Ústí nad Labem	+	+
Karviná	63,677	Moravia-Silesia	0	0
Opava	60,252	Moravia-Silesia	+	+
Karlovy Vary	51,807	Karlovy Vary	0	0
Teplice	51,223	Ústí nad Labem	0	0
Jihlava	50,100	Vysočina	0	0
Mladá Boleslav	43,684	Central Bohemia	-	-
<b>PARTICIPANTS</b>	<b>2,804,485</b>	<b>11</b>	<b>13</b>	<b>12</b>
<b>IN TOTAL</b>	<b>3,207,474</b>	<b>14</b>	<b>20</b>	<b>20</b>

Note: +/- = questionnaire drawn up/not drawn up, 0 = have not entered the project, \* = participation in eCitizenship 2003, LORIS 1st quarter of 2004. The LORIS 2004 questionnaire is also available for the town of Třinec.

**Contacts:**

jaroslav.solc@cityofprague.cz

renata.tomanova@cityofprague.cz

repa@vse.cz

## Issues of reporting towards the EU at the level of regions: the Thüringen region

*Petr Stránský, Business Architect, Stransky Consulting*

Public administration central authorities are not the only ones to be burdened with a host of new information duties arising from the accession to the European Union. Regional units must also be able to cope with these demands, especially if they want to make use of the extensive possibilities of EU financial support for their projects. However, compared to central administration bodies they have at their disposal significantly smaller budgets and human resources.

High-quality IT systems are thus an absolute necessity since they provide the possibility of implementing standard procedures and meeting EU requirements. The German region of Thüringen has had to face up to these requirements too.

### Basic theses divided into individual chapters

#### Reporting–EU requirement

Demands for providing summary information–reporting–at all levels of public administration have been growing very rapidly. At the present time, statistical analysis, generating outputs, providing a range of analytical data is not just a matter for specialised central administration organisations, such as the Czech Statistical Office, but also all regional units and/or their parts. Requirements for the provided information are particularly high if the regions make use of finance from EU sources (which means virtually most of them), possibly convey it to other organisations.

#### Tackling reporting demands by means of IT systems

Coping with the growing demands requires the use of information technologies that to the maximum extent automate operations connected with collection, evaluation, as well as provision, of relevant information, and concurrently are sufficiently flexible so as to be able to react to changes in demands for the required information, changes in information sources and other demands. A factor no less important is the capability of distributing information and making it accessible to various user groups, including the public–therefore, usage of open internet technologies has been constantly rising.

Hence, these systems are currently typically built up on the basis of flexible data processing technologies which ensure that the aforementioned demands are met. As a rule, these systems are initially ”set” only on a few relatively unambiguously defined “information processes”, and step by step extended into other areas, which requires large scalability and a virtually unlimited ability to use various data sources.

Accordingly, it is not suitable to build up systems by means of one’s own powers through made-to-order development, in combination with Excel tables, as has been applied in plenty of cases. It is appropriate to create from the very beginning a knowledge system of data processing and distribution which would, without increased costs, also be applicable with the gradual development of demands, processing of new data and covering of new processes.

#### Utilisation for management and own operation

It typically occurs that following the first phase of meeting mandatory requirements of the EU and/or public administration central authorities there is consideration of whether the existing data can also be used for ”one’s own” needs. In so far as a system is from the beginning built up in a sufficiently flexible manner, it is easily extendable as a part of support for decision-making of a self-governing unit, analytical activities and other areas of one’s own operation. Quite frequently, such a system gradually becomes the centre of in-house management and control mechanisms.

**Example of the Thüringen region (Germany)**

A classic example of “coping” with the demands for documentation and reporting towards the EU is the Thüringen region (Germany), primarily within the framework of one of its agencies—Thüringen Aufbaubank. It was established in 1992 as the development bank of the free state of Thüringen. The bank has its main headquarters in Erfurt and serves to support small- and medium-sized businesses by means of grants and low-interest loans. Furthermore, the bank is engaged in regional development, support for technologies and housing construction. It was precisely the area of subsidies, or making use of EU funds within benefit programmes, and their rapid development that required change in reporting procedures.

Originally, this system was based on a combination of a system developed by themselves, Excel tables and dBase programs, which primarily drew information from the SAP financial system. Compilation of reports usually took several days, a status which eventually became unacceptable.

The main requirements for a new system included acceleration of output creation, consolidation of EU reports with internal needs, utilisation of existing data sources without intervening into the applications producing them and enhancement of reliability of the information provided.

Created as a result has been the central “Infohouse” where data from individual systems are concentrated after having been purged. At the same time, built up above this system has been an analytical layer making it possible to arbitrarily analyse data and thus use them for in-house needs—to compile repeated reports or define new ones. Reporting towards the EU was unified too and a subsystem for evaluation and assessment of granted loans established.

This system will be gradually extended for use by other agencies of the region (a total of 18). It has become the backbone of reporting towards the EU, national and regulatory authorities.

**Conclusion**

The EU certainly brings, especially at the level of regions and municipalities, considerable demands concerning the collection, processing and provision of data about one’s activity, conduct of a region etc. It is beyond doubt that from the viewpoint of regional representatives these demands are more or less extra bureaucracy (which is only partially true since it often adheres to the possibility of making use of EU funds for one’s own support, as well as support for organisations, including commercial firms in the region) and, accordingly, it is necessary to tackle them as simply and cheaply as possible.

Hence, it is advisable to use flexible systems that can be rapidly implemented and would be sufficiently pliable so as to be capable of being adapted not only to a change in requirements for the structure of data provided, but also the sources used. An aspect of no less importance is making use of these data for one’s own operation, thus valorising the investment laid out.



## BusinessInfo and related services of the Economic Chamber of the Czech Republic

*Tomáš Vostřel, Manager of the regional part of the InMP project,  
Economic Chamber of the Czech Republic*

The BusinessInfo.cz internet portal run by the governmental agency CzechTrade is an excellent portal solution for comprehensive provision of information about the “business environment” primarily intended for users with active access to the internet and IT. Accordingly, for those who master these technologies, trust them and are able find the necessary information in information sources. On the other hand, as statistics have shown, there are still a considerable number of entrepreneurs who know these technologies and use them to a limited extent (turnkey web presentations, email), but if possible give preference to personal contact, which in the field of informing about the “business environment” is provided by, for example, the solution operated by the Economic Chamber of the Czech Republic—the Information Places for Entrepreneurs (InMP) project.

The administrator of the Information Places for Entrepreneurs project is the Ministry of Industry and Trade, while the Economic Chamber of the Czech Republic is the subject assigned with the project’s implementation.

The Economic Chamber of the Czech Republic is a legal entity constituted by Act No. 301/1992 Coll., on the Economic Chamber of the Czech Republic and the Agrarian Chamber of the Czech Republic. On the basis of law, the Economic Chamber of the Czech Republic associates entrepreneurs and fulfils the function of enterprise self-government. Membership of the Chamber is voluntary. At the present time, the Chamber has approximately 13,000 members, with large enterprises, as well as small- and medium-sized businesses, being represented.

By law, the Economic Chamber of the Czech Republic currently does not perform any activities that would be themselves unique and upon which the Chamber could build its key competences.

The Economic Chamber of the Czech Republic is not financed from the state budget, is not itself an administrator of a budget appropriation, nor is it managed by another appropriation administrator. Consequently, the law does not anyhow favour the Economic Chamber of the Czech Republic during allocation of state budget finance as against other legal entities that are not organisational components of the state either.

### Strategic concept of the InMP project

- To create a centrally controlled, clearly defined network of contact places within the framework of the regional and branch structure of the Economic Chamber of the Czech Republic which will be able to provide up-to-date and required information for small- and medium-sized enterprises (SME) directly or after defining a problem through reference to a specialised firm or the respective institution.
- By means of this chamber network, to provide commercial and non-commercial services (customary services provided by the Chamber, new services of the rating type, services connected with drawing finance from Structural Funds, register, programmes of the EU and the CR supporting SME etc).
- To offer this nationwide network to other subjects (the state, banks, business subjects, associations etc) for materialisation of their plans primarily oriented to the SME segment.

### Structure of the InMP network

The Central Information Place within the office of the Economic Chamber of the Czech Republic manages and coordinates the project. It issues methodologies, trains network operators and carries out supervisory activity. It communicates with the programme administrator (Ministry of Industry and Trade) and civil service authorities. It administers the Information System of InMP. Supervising the operation of the Central Information Place is the Steering Committee, representing a supervisory body

appointed from representatives of the Board of Directors of the Economic Chamber of the Czech Republic and directors and coordinators for the chamber's regional and branch part. Its task is to oversee the project's implementation and discuss strategic concepts and project changes, as well as to resolve essential problems at the chamber level.

The Supervisory Body is an interdepartmental committee consisting of representatives of the respective ministries.

The regional network forms the project's contact part. It consists of 14 regional coordination places, 77 regional information places and their so-called agencies. Currently there are 49 of them, with the goal being to have InMP offices in all municipalities of type III by the end of 2005.

The branch network forms the project's source part. At present, 19 branch coordination places are accredited, covering by means of specialist information direction and coordination all trades for which it is possible to receive a licence in the Czech Republic. The remaining activities and cross-sectional topics are covered in information terms by analysts of the Economic Chamber of the Czech Republic utilising both cooperation with branch coordination places and other modules of the InMP information system, primarily the Information Refinery.

Range of services provided:

- information service (information about information), including general information about the region;
- general information about conditions and/or changes in the business environment within the EU and the single European market;
- branch information, placement of a specialist request through the InMP information system to a branch coordination place which draws up the answer;
- Czech legislation for entrepreneurs;
- information about programmes supporting SME at the regional and national level;
- provision of educational programmes (within both regions and the centre);
- consultancy—general, mediation for specialised consultancy, legal, economic, organisational (integrated with other organisations and institutions supporting SME);
- overview of the possibilities of financing business activity from supporting programmes;
- the capability of providing individual consultations concerning EU issues;
- commercial supplies and demands in the Czech Republic and abroad, commercial services;
- information about CEI, CEBRE products, as well as services provided by other information places (EuroInfoCentres, RPIC, BIC, CzechTrade centres, ICU) and other institutions supporting SME (at the regional and national level).

### **InMP Information System**

All workplaces are interconnected by means of the information system of Information Places for Entrepreneurs, InMP IS. The system is modular. The Operating System module (or also Deskhelp) ensures circulation of requirements among individual places. The Summaries module provides statistical data. The FAQ module is used for repeated and always guaranteed information—its utilisation accelerates the entire process of preparation of answers, if the requirement's specificities so allow without it being to the detriment of service quality; the module can also be used for distribution of paid information. The Cash Desk module registers sales of commercial services.

The Information Refinery (IR) module is conceived as an integrating layer of information sources of differing quality, structure and value. It forms the information core of the entire system, which contains other functionalities, among them intelligent indexing, taxonomy and search tools, including semantic analysis. Hence, the Information Refinery is an extremely important accessory and intelligent information broker of information sources. Within the framework of the project, physical interconnection with the Businessinfo.cz portal was established. This portal has already built up data bridges with other institutions, thus the IR is able to use them. At the same time, the possibility of acquiring information from the internal information system of the Economic Chamber of the Czech Republic opens up. Owing to this technology, the quality and scope of services provided by the Busi-

nessInfo.cz portal are increasing. The information produced will also be provided to other portals of public administration subjects, for example, PVS.

Furthermore, the InMP IS links up to other information systems of the Economic Chamber of the Czech Republic and to the Catalogue of Firms and Members, which concentrates data about members of the Economic Chamber of the Czech Republic, companies cooperating and clients of the InMP project.

## **Conclusion**

The network of contact Information Places for Entrepreneurs completes the BusinessInfo portal and they together form a comprehensive information solution for all business subjects.

Owing to its “interactivity” between an entrepreneur and an employee of an InMP information place, it can explore problems in greater depth. This happens by means of a direct linkage of an employee of an InMP contact place to “live” specialists for all enterprise branches that are associated in the structures of the Economic Chamber of the Czech Republic. These specialists use in their work the functionalities of the InMP Information System (the Operating System, FAQ, the Information Refinery, Catalogue of Firms and Members...).

## City of Vienna—A modern approach to city management

*Petr Zavoral, Country Manager, SAS Institute Czech Republic*

Management of self-governing units has become an increasingly complex task which, in addition, involves growing demands for the quality of direct and indirect services provided. Consequently, the approach to management of self-governing units has been increasingly taking over the principles, procedures and techniques implemented in commercial organisations. At the same time, it is necessary, primarily in the case of big cities, to cope with a much more complex situation resulting from, among other things, a significant difference in the structure of commercial and self-governing organisations. Whereas the former have in their output indicators relatively simply to measure, such as profit, turnover, share prices etc, coming into play in the case of self-governing units is the comprehensive objective entailing improvement of the quality of life in the administered territory. After all, attainment of this intention is also accompanied by less measurable facts combined, in addition, with the situation whereby a number of operations of a self-governing unit are dictated by law.

By means of state-of-the-art managerial approaches, among them Balanced Scoreboard, the City of Vienna has over the long-term improved its ability to satisfy its inhabitants and employees, as well as raise the quality of services it provides. To support strategic management, it uses an array of IT tools allowing for materialisation of these intentions.

### General challenges for management of cities and other self-governing units

At present, it can be stated that management of cities ranks among the most demanding managerial tasks. This primarily applies to countries where the share of the private sector in the development of municipalities is smaller, therefore, cities bear a relatively higher responsibility in fulfilling long-term urban development plans.

At the same time, it is necessary to realise that a self-governing unit must perform a number of disparate tasks, ensure reliable execution of administrative operations and concurrently develop its activity in the time frame of decades. As a result, management of commercial organisations and cities or other self-governing units differs considerably.

### Applying experience from the commercial sphere

Despite significant differences between management of companies and cities, it is possible to find a number of approaches (in the form of best practices) in the commercial sphere that can be successfully applied in the environment of self-governing units. One of the areas is strategic management, which in the past 20–30 years has been undergoing extremely vigorous development. Earmarked as the most important can be utilisation of strategic maps modelling, subsequent definition of key indicators (KPI—Key Performance Indicators and Balanced Scorecard), which have been increasingly implemented in the commercial sector.

As regards municipalities, of primary importance is the ability to interconnect long-term objectives (which urban development bears upon but whose outputs are virtually invisible in the short-term perspective) with immediate activity, or its outputs, and fulfilment of these long-term goals. Thus, it is possible to concurrently measure the performance and fulfilment of objectives of individual parts of a city organisation or even subordinate organisations and their effect on the whole.

### Possible approach to strategic city management

Of course, it cannot be said that there exists anything like the best or one-and-only approach to strategic management of self-governing units. It can be stated nevertheless that there are common principles which, irrespective of the real applied procedure in strategic management, have absolute validity. Owing to a relatively high formalisation of plans for development of cities and their parts, municipalities do not in the main face up to an unclear mission for their operation. Accordingly, the question is

how to appropriately implement the approaches described above. When it comes to cities, it is quite usual that a virtually inexhaustible set of data and possible indicators is available, with the greatest problem being to simplify and systemise this status. The objective of creating a system for performance quality measurement is not to install dozens of disparate indicators that only serve to dim reality in the result but, conversely, to minimise their quantity at the highest level into an intelligible figure unambiguously expressing where an organisation is heading and how it manages to fulfil its strategic intentions.

### **Strategic management and IT systems**

Strategic management is primarily based on the capability of assessing the situation and comparing it with the planned status, adjusting deviations and reacting to changes in the environment. Given the situation whereby the complex environment of municipalities is not possible to define and analyse in a simple manner, it is precisely the aptitude of collecting an enormous amount of data, their evaluation and presentation where IT systems make themselves felt.

The basis of the system supporting strategic management is thus integration of data which are used for evaluation of individual indicators and/or their further analysis. This system mainly utilises data of other systems and allows for their mutual interconnection. Typically, part of this system is financial controlling since, despite the fact that soft indicators are largely used within these systems, financial information is the backbone.

The presentation part, currently specifically implemented in an internet interface, should ideally make it possible to use the above-mentioned analytical approaches whereby individual facts can be unscrambled (i.e., for example, fulfilment of yields, into their individual components). Therefore, very frequently used as a user environment of a personal computer is the so-called dashboard (simulation of a pilot's dashboard), by means of which the user has the possibility in a lucid graphical environment to monitor the respective indicators, their fulfilment and possible reasons for the momentary status. Also suitable, so as to be able to change in a relatively simply manner the structure, are disintegration and distribution of indicators (especially for the implementation phase when the entire system is being attuned, and during its gradual implementation and propagation throughout the organisation).

Essential too is flexibility during the system's development since it is typically implemented in a flexible manner and gradually propagated throughout the organisation. Furthermore, it is necessary to ensure the ability to append new data sources, either to newly installed systems or external sources.

### **Experience of the City of Vienna**

Although the City of Vienna does not rank among the largest cities in the EU, it is a good etalon for comparison of quality of services, quality of life in the city etc. At present, Vienna has a population of approximately 1.8 million. Working in its services are nearly 70,000 city administration employees and it has at its disposal a budget of EUR 10 billion. The city administration includes a host of "disparate organisations", such as housing administration (250 thousand municipal flats), healthcare facilities (26 hospitals), schools (more than 400), libraries etc. For these reasons, it comes as no great surprise that demands for management of the City of Vienna have been constantly growing. In reality, this has also made itself felt in increasingly higher citizen and company demands on services provided, pressure on budget reduction, constant growth of areas the City of Vienna has to cope with etc. Hence, the City of Vienna has come up with a programme of continual improvement of management effectiveness focused on increasing effectiveness and optimising processes, making goals and responsibility for results more transparent. Over the long term, the City of Vienna has evaluated an enormous quantity of information about citizens and employees' satisfaction, and placed relatively great emphasis on "soft" indicators of the quality of its operation.

The result is gradual implementation of the Balanced Scorecard methodology in the form of building up an integrated system of strategic management utilising data from operating systems. At

the present time, the system is accessible to representatives of the administrative department (approximately 1,000 employees), and it will be gradually made accessible to heads of other departments and employees.

### **Further possibilities of development and application**

It is evident that application of a similar approach is possible virtually limitlessly in any self-governing unit, albeit to a certain size the benefits of application are minimally disputable. Differing will be the composition of target indicators and the method of their evaluation. Nevertheless, the basic principle will be the same—evaluation of the quality of the city's management and performance of operation on the basis of unambiguous parameters. It is necessary to be aware of the fact that the basis is always a clear strategy of the part of the city, which is then “measured” by the implemented strategic management system utilising data from existing operating systems and/or external data sources.

The system itself then serves both for the city management and can also be gradually implemented at lower levels, where it serves for access to information about execution of its part of operation. Eventually, outputs, especially when it comes to specific indicators (for example, satisfaction of citizens), can also be accessible to citizens in real time through the internet interface.

### **Conclusion**

The described concept and example clearly demonstrate the benefits of advancing from “clerical” administration to managerial administration of cities and other self-governing units. Undoubtedly, improving the professionalism of management is another stage, after execution of individual operations of cities has become a matter for specialists. Since quality of operation, primarily quality of management of cities and other self-governing units, has in many cases a direct and fundamental impact on the quality of our lives, increasing effectiveness in this area is extremely important. Making use of experience from EU cities is certainly the greatest possibility of rapidly changing and developing the manner of city management.

It is not only the example of the City of Vienna that concurrently shows two key elements—use of IT allows for materialising the presented concepts in real life and, at the same time, it is necessary to proceed in these projects extremely consistently, step-by-step. There is no “magic” solution that would effortlessly make it possible to implement a concept of strategic management, just as there is no single methodology in which salvation can be found. Utilisation of the methodology of creating strategic maps, KPI and/or BSC is not the goal in itself but merely a method of attaining the desired objective. The Balanced Scorecard method allows one to define what to focus on in an institution's strategic development, how to effectively measure and evaluate the defined indicators. However, subsequent operations for an organisation's management arising from the acquired indicators must be carried out by an experienced team of executive staff. Without their active approach, implementation of the BSC method would be an end in itself.

## Bilbao & the II World Summit of Cities and Local Authorities on the Information Society

*José Ignacio Zudaire, Vice-Minister of Industry, Basque Government*

### From Lyon to Bilbao: Local Authorities Developing Their Agenda

The I World Summit of Cities and Local Authorities on the Information Society took place in Lyon on 4–5 December 2003, culminating with the adoption of the “Declaration of Lyon”, which sets out the principles of an Information Society accessible for all, democratic, equitable and diverse. This political vision of local authorities from all over the world was submitted to the General Secretary of the UN, Kofi Annan, representing the contribution of cities to the first phase of the WSIS.

The Lyon Summit enabled the proposals formulated by the Local Authorities of Asia, Africa, Latin America and Europe to be gathered together with regard to the priorities to be dealt with. In this sense, the Lyon Plan of Action brings together good practices and recommendations resulting from the experiences of committed local authorities as regards the Information Society. The Lyon proposals were gathered together in the working programme of the UCLG and will enable local authorities to progress in their contribution towards a fairer and more understanding Information Society.

### The II World Summit of Cities and Local Authorities on the Information Society

will be held in Bilbao from 9–11 November 2005

Through the Bilbao Summit, Local Authorities aim to promote a truly digital solidarity. To this end, the Local Authorities state that:

- They are, in collaboration with the other players involved, a determining political agent as regards the Information Society, and that they are willing to take on this responsibility in a context of continuous dialogue with States, civil society and the private sector, both on a local and international scale;
- They are effectively compromising towards setting a funding mechanism for Digital Solidarity in motion, following from the principle<sup>7</sup> of Geneva to ensure the fair development of ICT, job creation and access to the research and developmental capacity of their communities;
- They propose a public-private co-operation space to create contents which respond to the needs of citizens;
- They support the training of Local Authorities in new responsibilities and jobs in the field of the Information Society.

The Bilbao Summit will adopt a Declaration and a Plan of Action which will reflect the specific commitments endorsed by Local Authorities and their partners to set in motion a fair and diverse Information Society which will facilitate new opportunities for development over a 10-year period (2005–2015).

### The players at the Bilbao Summit

The Bilbao Summit is geared towards all those who are responsible for developing an accessible Information Society to all people, meeting the needs of citizens and creating new jobs.

The target groups of the Bilbao Summit are:

- Political representatives of cities, regions and other agents of decentralized administration;
- Members of Parliament and members of Assemblies of elected candidates;

---

<sup>7</sup> Based on the Principle of Geneva defined by the President of Senegal, Mr. Abdoulaye Wade, the public sector should take into account when Information Technologies services are offered to them that a contribution of 1% on the contract obtained by private ICTs services providers (hardware and software) is made to the Digital Solidarity Fund. Such voluntary contributions would give private businesses the right to use a “Digital Solidarity Fund” label on their equipments and materials.

- Representatives of Regions and Local Groups;
- Representatives of companies from the ICT sector;
- Economic leaders;
- Researchers and representatives from the academic world;
- Members of Civil Society who act on a local and international level.

Around 2,000 local representatives from all over the world are expected at the Bilbao Summit.

### **Bilbao and its commitment in favour of digital solidarity**

The Basque Country is a region which is actively involved in the development of the Information Society.

On a local level, the Basque Country pursues a policy of development by supporting its productive industry and by a successful economic and revitalization process of areas which are backed up by the potentialities of ICT. The Bilbao Summit will provide the participants with the chance to visit successful experiences promoted through the “Plan Euskadi in the Information Society.”

Important urban projects by prestigious architects have transformed its appearance, making it a reference point and a “living museum” of world architecture: Gehry’s Guggenheim Museum, Foster’s Metro, Calatrava’s new airport terminal and the Abandoibarra Master Plan by Pelli, are some of the many architectural and infrastructure projects which have transformed it into a city that combines economic development and aesthetic appeal successfully.

On an international level, the Basque Country has committed itself to supporting the training of Local Authorities, creating an International Training Centre of Local Authorities (CIFAL) specialized in the Information Society. In its capacity as a collaborating centre of the United Nations Institute for Training and Research (UNITAR), CIFAL BILBAO helps to develop the powers of Local Authorities through the exchange of experiences and the formulation of plans of development of the Information Society adapted to the specific needs and potentialities of each territory.

The Basque Country has also launched the first Network of Local Authorities for the Information Society, IT4ALL, created to give a voice to Local Authorities and to systematize the knowledge available in order to facilitate cooperation in this field.

Lastly, the Basque Country is one of the founding members of the Digital Solidarity Fund, an initiative whose creation was decided during the Geneva World Summit and which attempts to channel aid from the most developed regions towards developing ones, so that they may access the New Information and Communications Technologies.

### **Organizers and support**

The Bilbao Summit is organized by the Basque Government and with the support of the UN through the United Nations Institute for Training and Research (UNITAR).

It also has the support, among others, of:

- United Cities and Local Governments (UCLG)
- Digital Solidarity Fund (FSD)
- Bilbao City Council
- CALRE
- Citynet
- eris@
- Global Cities Dialogue
- IT4ALL
- URB-AL Network 13



## EuroCrest Contest 2005

### Best of the web site European competition of towns and communities

Organizers of the Conference Internet in Public Administration/Local and regional Information Society/Visehrad Group for Developing Information Society (ISSS/LORIS/V4DIS), the biggest event of this kind in Central, Eastern and South-Eastern Europe, launch annual competition EuroCrest. This competition is based on experience gained from the Czech contest Golden Crest and on consultation with European Union experts.

The aims is to reward excellence and promote the exchange of best practices, to highlight the efforts made by European local administrations in using Information Society Technologies to improve the quality and accessibility of their public services and to speed up the development of on-line administrative services in Europe.

### Winners of the EuroCrest Contest 2004

1.	Zielona Góra	Poland
2.	Lucenec	Slovakia
3.	Nyiregyháza	Hungary
4.	Riga	Latvia
5.	Panevezys	Lithuania
6.	Timisoara	Romania
7.	Gabrovo	Bulgaria
8.	Vysocina region	Czechia

### History

First winners—towns Jihlava (Czechia), Bernolakovo (Slovakia) and Lodz (Poland)—were awarded during Conference Internet in Public Administration ISSS 2001 held in Hradec Kralove 26<sup>th</sup>–27<sup>th</sup> March 2001.

Official declaration of results of the EuroCrest 2002 Competition for the best web presentation of European towns and communities was a part of the Conference ISSS 2002 (25<sup>th</sup>–26<sup>th</sup> March 2002). European Commission representatives Gerald Santucci and Giangaleazzo Cairoli gave the prizes at a ceremony to 6 winners: towns Stara Zagora (Bulgaria), Most (Czechia), Tapa (Estonia), Vilnius (Lithuania), Szczecin (Poland) and Nove Zamky (Slovakia). A special prize was given to the city of Vienna (Austria), whose web pages can be used as a reference as far as quality is concerned.

Winners of the EuroCrest Contest 2003: Praha (Czech Republic), Vranov nad Topľou (Slovakia), Tartu (Estonia), Jurbarkas (Lithuania), Ventspils (Latvia), Sopoty (Poland), Rousse (Bulgaria).

### Subject of the contest

The focus of the contest EuroCrest is on:

- Exploitation of information and communication technologies as a tool of intensification of democratic mechanism especially in these areas:
  - Transparency in decision making by elected authorities
  - Degree of opening to the public
  - Extent of public participation in preparation of decision making influencing everyday life of the municipality
- Level of the delivery of information and services to citizens and businesses (the four-stage model adopted for eEurope's benchmarking of eGovernment services to citizens and enterprises: Information–Interaction–Transaction–Integration).

### **Participants of the contest**

The contest is open to all European towns and communities; it is under consideration to create two categories according to population there.

### **Organizers of the contest**

Announcer of the contest is the Golden Crest Association in the cooperation with the European Commission and with European IT networks, e. g. TeleCities, Global Cities Dialogue ecc. The same team preparing the ISSS/LORIS/V4DIS Conference arranges the contest. Results and winners will be published during the Conference (Hradec Kralové, Czech Republic).

### **Nomination**

Based on the call for proposals associations of towns and communities of the candidates countries will nominate competitors–winners of national contest, if this national contest is held, or if not, than on the bases of their own evaluation.

It is in the competence of jury to nominate web sites of the towns and communities from non-candidates countries.

## The Union of Towns of Slovakia

The Union was founded at the initiative of the Club of Mayors of the Slovak Republic on April 29, 1994 in Kosice. 12 towns and cities established the UTC as a voluntary association of local governments in the Slovak Republic. Members of the Union are today almost all large and middle large towns in Slovakia; members are together 72 towns, 9 municipalities and 5 special members—municipal parts of Bratislava and Kosice. Union members represent approximately 2.5 millions people. The Union co-ordinates its activities with the Club of Mayors of the SR, the Association of City Managers (APUMS), the Association of Local Economists of the SR (AKE SR) and the Association of Historic Cities and Municipalities of Slovakia (ZHMOS). It also has broad contacts and ongoing co-operation with home and foreign institutions, foundations, and non-governmental organizations. Based on mutual contracts Union cooperates with Association of Industrial Entrepreneurs of Slovakia, Slovak Chamber of Commerce and Industry and Association of small and middle Entrepreneurs. Union participates in the Economic and Social Council (ECOSOC) of the United Nation activities and has its representation in the Council of Local and Regional Authorities of Europe (CLRAE), Council of European Municipalities and Regions (CEMR) and Committee of the Regions (COR) of the EU. UTCS's main goals include complex and systematic reform of government, high economic and fiscal independence of territorial and interest self-governments, mutual co-operation of cities for solving common problems and development of Pan European and mostly Middle European cooperation of towns, municipalities and regions. UTCS is an announcer of a Slovak national contest for the best municipal website, GoldenCrest.

## The Hungarian National Association of Local Authorities (TÖOSZ)

TÖOSZ was established on 10 March 1989, with the aim to give assistance to the development of settlement autonomy and to participate in the creation of a social, economic and legal environment friendly to local governments. The number of settlements was 152 at the time of the establishment of the Association.

TÖOSZ differs from other interest representing associations of local authorities not only because it is the oldest with the largest number of members, but also because it comprises all types of local authorities (the capital, the capital districts, village- communes, large village - large communes, town, town with county rank and the county). TÖOSZ aims at holding dialogues with political parties, but performs professional activity also independently of them. The local governments being members of TÖOSZ are represented generally by their mayors in the organizations of the Association (less frequently by local assembly members or notaries). Through them almost all the political parties and other social organizations, which took part in local elections, are represented. As a consequence of the character and the results of the elections, the majority of representatives are, however, independent.

The primary tasks of TÖOSZ are in particular:

- revealing, conciliating, mediating, protecting and representing interests,
- promotion of local self-government operation,
- encouraging the enlargement and successful operation of local government assets,
- professional and organizational support to the cooperation of local authorities,
- conciliations concerning the budgetary decisions of the Parliament,
- giving an opinion of draft acts and other state decision drafts,
- exercising the right of presentation,
- goodwill missions concerning debates between members,
- participating in the international cooperation of local authorities, promoting international relations of the members,
- organizing different services,
- operating consultative, interest revealing and coordinating forums for the members,
- promoting information flow and relations between members,
- assisting members in case of grievances and in legal affairs,
- promoting the social control of power exertion.

TÖOSZ has given opinion, ever since its establishment, on several hundred legal regulations, it has initiated in several cases the preparation or modification of acts concerning the interests of local authorities. In the case of otherwise not avertable violations of local government interests the Association applied to the courts, it required even the intervention of the Constitutional Court. Among these some issues can be mentioned, already known by the public and resulting in granting additional assets to local authorities, for instance: proceedings of the Constitutional Court in connection with the transfer of real estates( precedence-lawsuits in the Supreme Court concerning the ownership of pharmacy centres (proceedings in connection with the ownership of centrally located plots (the decision of the Constitutional Court No. 36/1998 (IX. 16) in the issue of the assets of public energy utilities, further the legal decision of the Supreme Court No. 3/1998 on public administration.

Since its creation TÖOSZ is an active partner in multilateral and bilateral European international local authority co-operation.

TÖOSZ obtained an observer status in the Standing Conference of the European Local and Regional Authorities of the Council of Europe (CLRAE) in December 1989, and then its representatives began to work as members of the congressional delegation of the Hungarian local authorities.

The Association is in contact with the International Union of Local Authorities (IULA) since March 1990. In 1999, it became a full member of the CEMR and the IULA and is also part of the newly created World Organization, the United Local Authorities and Cities.

The TÖOSZ plays an active part in the realization of the program of the CEEC-LOGON international network led by the Association of Austrian cities and towns.

The Association has reached important results with the Committee of the Regions, out of 12 representatives of the Hungarian delegation to the CoR, 2 persons were delegated by TÖOSZ.

As part of the already mentioned multilateral international local authority co-operations and bilateral relations with the Austrian, German, French, Finnish, Slovak, Swiss, Polish, Greek and Italian national local government associations, TÖOSZ also contributed to the preparation of its local government members to the accession to the European Union. In the course of its international activities, the Association works together with the Integration Office of the Ministry of Interior and makes use of the information force of the TÖOSZ Newsletter, Journal, Website and its Series of Publications titled Best Practices, in Hungarian „Jótár”.

Further current projects in the Association are as follows: the TÖOSZ is the Hungarian anchor of the Local Government Information Network, it has a representative in the Elected Women Section of the CEMR and thus actively participates in the programs of this section. The Association also acts as partner in the International Communal Network led by the Association of Austrian Municipalities and function within the Interreg III/C project.

### **TELEPÜLÉSI ÖNKORMÁNYZATOK ORSZÁGOS SZÖVETSÉGE–TÖOSZ**

Ungarischer Landesverband Kommunaler Selbstverwaltungen

Budapest, H-1067. Eötvös u. 10. Address for letters: H-1386 Bp. 62. Pf.: 908

Tel.: (36-1)321-2496, Fax: (36-1)413-0482

Homepage: [www.toosz.hu](http://www.toosz.hu) E-mail: [toosz@toosz.hu](mailto:toosz@toosz.hu)



## The Association of Polish Cities–Związek Miast Polskich

### History

The Association of Polish Cities is an organisation whose rich tradition goes back to the interwar period.

The years 1917–1939 saw a large number of achievements in the area of legislation as well as the economic and cultural promotion of cities. The organisation was involved in editorial and training activity as well as in the extensive information exchange within a range of municipal civil services. The APC was also engaged in successful cooperation with similar organisations from other countries. After World War II the activity of the Association of Polish Cities was prohibited. The initiative of its restitution emerged following the first free local government election on 27 May 1990.

In a couple of months the councils of over 60 cities had resolved to join the Association and in January 1991 the Restitution Congress took place in Poznan–the statutory headquarters of the Association. In spring 2003 the Association membership was 265 towns and cities. Inhabitants of the member cities of the Association account for 76% of the urban population in Poland.

### Activity

#### Legislative Lobbying

Representatives of the Association sit on the Joint Committee of Central and Local Government. Positions on and draft amendments to bills which include provisions unfavourable to local governments formulated by the Board and its Committees, as well as those worked out during conferences and meetings, are presented at the sittings of:

- the Joint Committee of Central and Local Government and its work teams,
- parliamentary committees,
- respective ministries.

The Association supports cities and local governments in important matters which are referred to the Constitutional Tribunal in cases when the voice of local government has not been respected. The APC also motions the President of the Republic of Poland to reject a bill or to take a legislative initiative on issues of material importance to the local governments. Representatives of the APC lobby not only Parliamentary committees or individual ministries, but they also participate in the work of:

- the Tripartite Social and Economic Committee,
- the National Council of European Integration,
- the Supreme Employment Council,
- the State Real Estate Board,
- the Round Table on Health,
- the Sustainable Development Council,
- the Heraldic Committee, Ministry of Interior and Administration,
- the Council of the Foundation of the Polish Promotion Emblem and the “Teraz Polska” Contest,
- the Council of the Foundation of the Agency of Municipal Development.

#### Foreign Cooperation

The Association is the member of the Council of European Municipalities and Regions (CEMR), which unites 45 large national Associations of local and regional authorities in 31 European countries. The Association also has its representatives in the Congress of Local and Regional Authorities of Europe (CLRAE), which is a consultative institution of the Council of Europe, and in the Joint Consultative Committee of the EU Committee of Regions and Polish Local Governments. In the first years of its operation the Association established cooperation links with the National League of Cities

(USA). The experience of this organisation turned out to be helpful for the APC during its organisational stage.

On the international arena the Association strengthens cooperation between twin cities through the Town Twinning Programme of the European Commission. The Association also maintains contacts with similar local government organisations in Europe and the USA.

The partners, with whom the Association has concluded cooperation agreements, include:

- the German Section of CEMR,
- the Association of Estonian Cities,
- the Association of Ukrainian Cities.
- The Association cooperates and carries out joint projects with a number of CEMR members:
- the National Association of Local Authorities of Denmark,
- the Finnish Association of Local and Regional Authorities,
- the Austrian Association of Cities and Towns,
- the Local Government International Bureau in London,
- the Association of Dutch Municipalities,
- the Association of Local Authorities in Lithuania,
- the French Section of CEMR,
- the Association of Towns and Communities of Slovakia,
- the Swedish Association of Local Authorities,
- the Partnership of Hungarian Local Government Associations.

Joint projects with other partners in Germany and Canada are also carried out.

## Promotion of cities

### Domestic and foreign trade fairs

- INVESTCITY Polish Cities Investment Fair—organised by the Association in Poznan since 1992,
- joint stands and group trips to specialist trade fairs (environmental protection, investment opportunities, real estate, tourism),
- investment opportunities exchanges.

### Conferences, seminars, workshops

The National Conference of Mayors (organised since 1992) and since 1999 the National Conference of Mayors, Marshals, County and Village Heads, organised by the Association, is the largest forum of representatives of local governments in Poland.

Assisted by experts of member cities and Polish and foreign institutions the Association organises:

- theme seminars and workshops (environmental protection, health care, municipal transportation, European integration and others),
- meetings of promotion offices.

### Exhibitions, competitions

Exhibitions and competitions aim at cultural promotion and create an opportunity for the exchange of experiences and promotion of innovative solutions:

- the National Festival of Cities' Bugle Calls (organised 6 times),
- the Exhibition of Municipal Insignia,
- the Exhibition of Municipal Poster (organised twice),
- the Review of Cities' Promotional Materials (organised 4 times).

The most important competitions prepared by the Association include:

- Innovations in cities (3 times),
- Promotion of my city,

- Investment offer of Polish Cities on websites,
- A Partner City of the European Union.

### **Research and surveys**

The Association of Polish Cities has conducted over 40 surveys on such issues as school subsidies, housing allowances, property taxes, barriers to investment or consequences of the 1977 flooding. Presently, the largest research project carried out by the Association is the Self-government Analyses System (SAS), which monitors the most important fields of public life in member cities: health care, social support, education, culture and transport.

Aims and tasks of SAS:

- long term monitoring of public services,
- cost and effectiveness of public services,
- assistance in day to day management,
- support of stands and positions taken in the lobbying,
- one joint database on cities taking part in the survey.

So far there have been three research projects of SAS:

- Project I pilot project financed by the United States Agency for International Development USAID involving 17 cities, which collected data for 1997,
- Project II involving 50 cities (data for 1999),
- Project III–58 cities (data for 2000),
- Project IV–65 cities (data for 2001).

The results can be found on the Association's website. The on-line Electronic Analytical Package processes the data and presents a wide array of in

### **Information activity**

- the Samorzad Miejski monthly (an insert to the Gazeta Samorzadu i Administracji),
- [www.polish-cities.pl](http://www.polish-cities.pl) website
- information insert in the Przegląd Samorządowy monthly

### **Information exchange**

The Association arranges sessions, conferences and workshops for the representatives of cities. There are 15 task committees at work with nearly 300 representatives of cities participating in their activities. Researches and surveys are conducted whose outcomes are used in legislative procedures and made available to the member-cities.



## **The Union of Towns and Communities of the Czech Republic**

The Union of Towns and Communities of the Czech Republic is a voluntary non-political, non-governmental organization whose regular members are communities in accordance with the law on communities. The Union's basic aim is to defend the common interests and rights of the communities that make it up. At present, the Union comprises approximately 2,200 communities, that is, about 34%, in which around 7 million people live, representing more than 70% of the citizens of the Czech Republic. The Union is a constructive partner of government and parliamentary political representatives. It contributes to proposed legislative measures by commenting on legal norms in areas concerning local administration. The concept of the "Union" refers first and foremost to village and town mayors who, beyond the concerns of their own community, also devote their time to the problems of local administration in general.

### **Foreign Cooperation and International Relations**

The Union of Towns and Communities of the Czech Republic is creating conditions for integrating Czech municipal offices into various forms of cooperation in the area of activities by local administration and local government bodies in Europe and other countries of the world. The Union works together with similar partner associations in other countries and also oversees cooperation between individual communities in this country and abroad. The Union is a member of the worldwide organizations IULA (International Union of Local Administrations) and CEMR (Council of European Municipalities and Regions). Thanks to its membership in CEMR, Union representatives have succeeded in gaining access to the Board of Regions, an EU advisory body and thus they have gradually been able to get acquainted with EU mechanisms and programs in practice. Members of the Union are also represented in the Congress of European Local and Regional Authorities. Furthermore, the Union coordinates a program of partnership cooperation for towns and communities.

The Union's priorities in field of international activities are as follows:

- to provide exact information about European Union, functioning of EU institutions and EU funding to Czech towns and municipalities and equipped them with knowledge in field of municipal administration and management capacities;
- to defend rights and to lobby for interests of Czech municipalities on national and European level;
- to promote twinning cooperation among Czech municipalities and municipalities abroad and assist with creation of new twinning arrangements;
- to promote mutual co-operation with European local government associations from European Union as well from candidate and East European countries;

The Union and its members continuously participate in international projects, which aim at experience and information exchange on EU issues and preparation of local governments for accession. For example our association is actively involved in the international network LOGON—Local Governments Network of Central and Eastern European Countries and in project Local Government Support Programme (LGSP-CE).

### **Committee for information systems of towns and communities (ISMO committee)**

The Union of Czech Towns and Communities ([www.smocr.cz](http://www.smocr.cz)) is an open interest, non-party and non-governmental organisation asserting the common interests and rights of municipalities. It proceeds in the spirit of principles from which the European Charter of Local Self-government issues. At the present time, the Union associates more than 2,300 towns and communities inhabited by a total of seven million people, i.e. more than 70% of the citizens of the Czech Republic.

Within the Union of Czech Towns and Communities, a number of specialist committees work as special advisory bodies to the Presidium of the Union. One of the most active is the Committee for Information Systems of Towns and Communities (ISTC–[www.munet.cz/ismo](http://www.munet.cz/ismo)), focused on information systems for self-government. It engages in promoting use of the Internet in the work of town and municipal authorities. It cooperates with ministries in preparing standards for public administration and self-government information systems, participates in organising specialist conferences and, naturally, expresses its opinions on proposed legal rules pertaining to informatics and concerning towns and communities. An integral part of the Committee's activity is cooperation foreign partners.

### **Priorities for the next period**

For its activities in the near future, the Committee set a number of priority problem areas. We list some selected topics:

- The communication infrastructure of public administration information systems, together with the security policy, is based on a general and implementing agreement. The National Geographic Information Infrastructure is among the other topics chosen. The expert group for geographic information will focus on the objective that within the revision of the State Information Policy the GI item be taken into consideration so that state map works are provided to and used on the basis of defined terms by the general public. Alongside a number of other goals, it will concern the creation of preconditions for transforming information for the citizen into graphic form.
- The ISTC Committee wants to continue paying permanent attention to Internetisation of municipalities according to the projects of the Ministry of the Interior, promote the development of public information services, the public administration portal, and improve the creation of towns and communities' websites. It will endeavour to contribute to information systems allowing for provision of information prescribed by law. It will also support the extension of electronic registries and completion of the Public Administration Information Systems Standard for hardware and software requisites of electronic registries.
- In terms of informatics, the Committee will monitor the manner of registration and circulation of documents between public administration bodies and express its opinions on solutions proposed in this area. It will also comment on the legislative assurance of basic registers of public administration information systems—the basic register of the population, the basic register of land identification and immovable assets, the basic register of economic subjects etc. The agenda of the Committee also includes issues pertaining to the Real Estate Register.
- The ISTC Committee has cooperated in the preparation of the ISSS conference in Hradec Králové, it will further develop collaboration with the PSP subcommittee and the Ministry of Informatics, all with respect to the reform's impacts on public administration information systems. It will also continue cooperation with foreign subjects in the development of information society—GCD, Telecities, Elanet, the European Commission and associations of municipalities, primarily from the candidate countries.

The mentioned priorities are not a dogma for the work of the Committee for Information Systems of Towns and Communities, but merely an orientation aid, fine-tuned during the course of the year according to the specific needs of public administration of the Czech Republic.

## Vysočina Regional Authority



Well placed in the center of the Czech Republic, the predominantly rural Vysočina Region sprawls along the Czech-Moravian Highlands, from which it takes its name (Vysočina means “highland“ in Czech). The Vysočina Region, one of the fourteen regions of the Czech Republic, has been known historically as a land of very poor and very tough people. The region gained this reputation thanks to its picturesque but rough countryside, which tested the capabilities and inventiveness of the people in fighting their destiny. The Vysočina Region is a part of the EU microregion NUTS 2 Southeast, and two of its districts–Jihlava

and Třebíč–are part of the Euroregion Pomoraví.

The Vysočina Region covers an area of 6,796 square kilometers, accounting for 8,6% of the territory of the whole Czech Republic, which makes it the country’s fifth largest region. The region’s population is about 517,511 habitants.

The main centre of business, cultural and social life in the Vysočina region is Jihlava. Thanks to its location, Jihlava acts as a gateway to the region. The other important centers of the region include the towns Havlíčkův Brod, Třebíč, Pelhřimov and Žďár nad Sázavou.

The Vysočina Region has the well-deserved reputation of being one of the cleanest and most picturesque parts of the Czech Republic. The Vysočina Region is characterized by small villages, which are scattered all over the rolling countryside. Even the important urban centers in Vysočina are miles away from the overcrowded agglomerations like Prague in terms of their cleanness and quiet lifestyle. The Vysočina Region offers a lot of cultural, sport and social activities. Vysočina boasts a number of cultural sights, some of which are in the UNESCO list of the world cultural heritage.

### Regional Authority IT Department

IT department of Vysočina regional authority consists of four divisions–Network Administration Div. (6 pers.), Databases and Applications Div (3 pers.), GIS Administration (3 pers.) and Conceptual Div (3 pers.). Main objectives of IT department are administration of network and Vysočina regional authority internal and external information systems, development of internal and regional geographical information system and building and supporting ideas of e-society and e-government in regional context all based on Regional IT Policy.

### Vysočina Region–Selected Parts of Regional IT Policy

#### *Health Services*

- Starting the basic data collection systems for monitoring and analysis of regional health and social trends. According to these basic data collection systems and according to the advanced health documentation systems there will be started a deeper knowledge analysis (statistics and data mining).
- Development of IT support for emergency systems–rescue actions navigation (real-time GIS data in combination with GPS), integrated emergency call system (callcenters, back-office applications, GIS integration)

#### *Social Basic Services*

- Basic IT infrastructure development in combination with public sector IS integration.
- Improvement of communication between public and non profit sector

- Technological and information support for disadvantage and endangered groups

#### *Transport and Urban Mobility Basic Services*

- Integrated transport system preparation and development
- Implementation of public transport optimization projects (models)
- Support of public transport information systems with emphasis on usage of GIS

#### *Basic Service Delivery*

- IT support for running public sector reengineering
- Communication infrastructure improvement
- Basic service optimal navigation for public using web applications
- E-Forms systems implementation and improvement, its back-office integration
- Data reengineering of public sector IS data architecture based on basic registry maximal usage
- Front and back-office systems improvement and its integration
- Support for public usage of electronic signature by maximizing supply of e-signature integrated services
- Implementation of CRM techniques and technologies

Some activities of IT department are involved in European programs, for example Prelude, TownTwinning (project LORIS) or EU Structural Funds.

#### **Selected IT Projects of Vysočina Regional Authority**

**Prelude**–IST project identifies the best practices and activities in IT over all Europe based on regional aspects. Vysočina in association with BMI are involved in work packages Basic service delivery Transport, Social and Health services. Prelude is now over. The Consortium agreed to continue the activities in a 2-year exercise, to be called **The Prelude Challenge**, which will start in January 2005.



**Loris and V4DIS**–conferences held in synergy with the ISSS Conference in Prague and Hradec Kralove, Loris is international ICT conference arranged as project of EU TownTwinning program, V4DIS is conference focused on Role of Municipalities and Regions in Process of Development of e-Government services etc.

**ROWANet**–is regional broadband optical network funded from EU Structural Funds, it is Backbone network which will provide different services–[www.rowanet.cz](http://www.rowanet.cz)



**EPMA, European Projects & Management Agency**, is a non-profit organization, settled by Region Vysočina and BMI Association in 2004. The main objective of EPMA is to develop international project based co-operation of European regions and regional partners towards knowledge based information society–[www.epma.cz](http://www.epma.cz)



**Kevis**–regional system serving for basic record-keeping typically of TOA services and simple accounting tasks–[www.kevis.cz](http://www.kevis.cz)



**ePUSA**–project supporting basic service delivery on regional level. The data sources are “centralized database of Czech regions and municipalities, directory services, GIS integration as one of information sources of national public service portal”–[www.epusa.cz](http://www.epusa.cz)



**SDZA**–Data Sources and Applications Administration System is supportive instrument for identification of data sets and software applications, which are needed to support agenda of individual parts of Regional Authorities. System involves detailed data on all processes and responsibilities in regional authorities in all Czech Republic

**HelpDesk**–is electronically supported instrument for reporting and disposing of users requests primary specialized to the IT area and expendable supplies.



## Global Cities Dialogue

« ...The development of the Information Society should be for the benefit of all citizens, communities and peoples of the world, regardless of race, social position, creed, gender, disability or age...» [Constitution of GCD]

The Global Cities Dialogue [GCD] is an international network of cities interested in working together for the realization of an “Information Society for All”, free from social exclusion and based on sustainable development. Initiated in November 1999 with the signature of the Helsinki Declaration “Mayors of the World for a Global Cities Dialogue on the Information Society” by eleven cities, the GCD-network counts nowadays over 180 cities worldwide.

The GCD-network represents an open framework for common actions promoting the digital inclusion and fighting the digital divide, namely reducing the gap between citizens who have access to the opportunities offered by the new information and communication technologies and people who are excluded from this emerging society. GCD builds on the premise that cities have a key role to play in the global Information Society, as they are the geographical, political, socio-economic and cultural entities where millions live, work and directly exercise their rights as citizens and consumers. The direct representation of Mayors ensures the necessary credibility and political authority.

As relevant political platform for sharing knowledge and experiences in the field of the Information Society at local and global level, GCD supports joint ventures between local communities, helps cities to generate synergies with the private sector as well as with broader government levels and tries to implement sustainable transfer mechanisms for best practices in the field of information technology.

Participation in GCD is free of charge, requires indeed a personal commitment by the Mayor or another local elected official expressly designated by the Mayor (HPR–High Political Representative). Furthermore, each city has to appoint a person as “sherpa”, representing the city’s position at the working level. The sherpas of the Steering Committee meet regularly, in order to work out the guidelines of the network’s activities and to prepare the official meetings of the political representatives. Decisions with political relevance are taken during the annual General Assembly Meeting, which is the most important event within the network.

GCD represents a new step in networking between cities as it is based on active co-operation. As the network does not dispose of any financial means, every project developed within GCD has to be financed by the member cities themselves.

Mayors or HPRs interested in becoming members of the Global Cities Dialogue may join the network by signing the Helsinki Declaration and agreeing with the Constitution of GCD, signed in Bremen in June 2000. Official signatory ceremonies of the Helsinki Declaration are always embedded in the framework of international conferences or GCD-events hosted by member cities.

More detailed information about the network’s activities and members, as well as on the upcoming events and planned signatory ceremonies of the Helsinki Declaration, are also available on the official web site: [www.globalcitiesdialogue.org](http://www.globalcitiesdialogue.org). For further information, please contact the GCD-presidency in Issy-les-Moulineaux: [eric.legale@ville-issy.fr](mailto:eric.legale@ville-issy.fr).



## Culture 2000–Czech Cultural Contact Point

The primary goal of the Czech Secretariat of the Culture 2000 Programme is to inform and provide consultation services related to the European Union's Culture 2000 Programme to the Czech public, primarily cultural organisations, and to promote their interest in multinational cooperation and realisation of relevant international cultural projects. The Theatre Institute in Prague was commissioned by the Ministry of Culture of the Czech Republic to serve as the national secretariat for the Culture 2000.

The Czech Cultural Contact Point is supported by the Culture 2000 programme of the European Union.

### The Czech Cultural Contact Point administers the following activities:

- to ensure the promotion and know-how of the Culture 2000 Programme to citizens of the Czech Republic,
- to facilitate the participation of the greatest number of interested persons (artists and persons working in the cultural field),
- to ensure contact with other institutions who provide assistance in the cultural sector of the Czech Republic,
- to assist in the connection and reciprocal activities of the participants/organizers of the Culture 2000 Programme and other subjects associated with various programmes of the European Union in the field of cultural projects,
- to establish and maintain contact with the European Commission and its partner organisations abroad, and facilitate the search for co-organizers of the project in the framework of the Culture 2000 Programme.

The Czech Cultural Contact Point works with the National Institute for the Protection and Conservation of Monuments and Sites, residing in the Culture Heritage Section of the Culture 2000 Programme. We suggest that projects related to the field of cultural heritage contact this section.

Czech Cultural Contact Point  
Theatre Institute, Celetná 17, 110 00 Praha 1  
E-mail: [info@culture2000.cz](mailto:info@culture2000.cz)  
<http://www.culture2000.cz>

### Cultural Heritage Section of the Czech Cultural Contact Point

National Institute for the Protection and Conservation of Monuments and Sites–Central Unit (NIPROCOMOS–CU)

Valdštejnské nám. 3, 118 01 Praha 1  
E-mail: [culture2000heritage@up.npu.cz](mailto:culture2000heritage@up.npu.cz)  
<http://www.npu.cz/html/culture2000heritage>



Education and Culture

# Culture 2000

# The National Broadband Access Policy Broadband Strategy of the Czech Republic

*Ministry of Informatics of the Czech Republic, 2005*

## 1. Introduction

As a full member of the European Union the Czech Republic has adopted the so-called Lisbon Agenda, which is aimed at making Europe the “most competitive and dynamic knowledge-based economy, capable of sustainable growth and with improved employment and social cohesion by 2010.”

A significant element in achieving these goals will be an economy based on knowledge, (a “knowledgebased economy”), or, put another way, the establishment of the so-called Information Society. This is mainly founded on the immediate and world-wide transfer of information and is characterised by the intensive use of electronic communication in many areas of human activity. One of the key instruments used for this exchange of information is the capability to use a wide range of voice, data, text and multimedia communications via so-called broadband access.

EU member states have drafted, or are drafting, national strategies for broadband Internet access aimed at speeding up broadband network development and at the same time stimulating the use of these networks, particularly via new Internet services mainly for households and small and medium-sized enterprises (SMEs). Broadband access opens up and supports opportunities to create new markets via the development of interactive and multimedia applications and services, which, when introduced, will then stimulate the development and supply of broadband access itself. In view of the considerable role to be played by broadband in the development of national economies and the EU as a whole, the “e-Europe Action Plan 2005” was approved in July 2002. Its goals were, amongst others, to promote the establishment of secure services, applications and content based on widely accessible infrastructure.

By the year 2005 Europe should have modern on-line services including electronic access to state administration services (e-government), education and training systems (e-learning, e-training), care and health services (e-health service, e-medicine) and a dynamic environment for electronic business and commerce (e-business, e-commerce). The media to be used to achieve these goals should be widely available broadband access at competitive prices and a secure communications infrastructure. For these reasons the Action Plan assigned each member state the task of compiling their own “Strategy for Broadband Internet” (hereafter only Strategy), which is usually referred to using the English term “Broadband Strategy.”

This Broadband Strategy for the Czech Republic leads on from the “State Information and Communications Policy” approved by Government Decree No. 265 of the 24th March 2004. The Strategy describes in both domestic and international terms the significance of broadband Internet access and sets out phases for its future development in the CR and specific measures for its support. It has based its assessment on the current state of broadband in the CR and throughout the world and the current and future technological possibilities available. The proposal for broadband development takes into account the requirements for countrywide access for all groups of the population, including support for rural and remote areas. It also includes basic principles for identifying cases which would require financial support from EU structural funds or from other sources. The Strategy defines the role and tasks of the State as part of the broadband access support process and lays out the basic Government measures in this field. Support will be aimed at both activities which stimulate supply in areas where this is not provided by the market, and also activities which support demand, i.e. support for content which requires broadband. It will be used as the starting point for a host of national activities which will be aimed at the CR achieving the goals set out in the Lisbon Agenda by 2010 at the latest, i.e. achieving a level of about 50% of the population using broadband.



## 2. The advantages of broadband access

Broadband is not a “service in its own right” which households and companies can purchase by itself, for its own sake. It should be understood as a medium which gives users access to the applications and services which they want and which they wish to use, and as a medium which does not restrict the user in any way when they use these services.

Broadband is currently a platform which can be used to provide services which would otherwise be impossible to offer, or which it would not be feasible to develop, because without broadband they could not be fully enjoyed by users. It should be viewed mainly as an element which opens up new possibilities and which has a reach, contribution and other consequences which we cannot fully describe and evaluate today. To a certain extent we are now at a similar situation as our forefathers were at the time of the invention of the printing press, or at the start of the building of transport infrastructure (roads, railways, etc.), where it was similarly not possible to precisely foresee how huge the impact of these inventions would be in the advancement of society.

The development of broadband is already helping to increase efficiency in many areas of people's current activities. For example, for state administration it enables new services to be provided and makes contact between the state administration apparatus and the citizen easier. For education it has led to an increase in levels of the knowledge and skills which ease a citizen's overall interaction with society as a whole. Broadband Internet access also has advantages for children and young adults in terms of the use of their free time (expanding educational possibilities, the opportunity to engage in discussion groups, make new contacts, take part in competitions, etc.). In the field of transport it provides access to intelligent telematics systems and information systems for drivers and passengers. In the commerce and business sectors it can be used to quickly conclude agreements, enter markets in geographically distant areas, to create a range of products or services which correspond to the actual requirements of consumers, and it can be used to make contact with clients and customers easier. In healthcare it can be used to diagnose patients irrespective of geographic location, and provide healthcare workers with reliable remote access to important diagnostic information, the results of examinations, etc.

The advantages of broadband access however do not end with the capability of speeding up and making easier activities which could still be achieved without it, albeit less efficiently, more slowly and to a reduced degree and with geographic limitations, etc. Its greatest advantage lies in the fact that it enables current activities to be carried out in an entirely new manner, which would otherwise not be possible. These possibilities are only just starting to become apparent, as are their considerable impacts on society as a whole. They include, for example, the possibility to work remotely (homeworking, teleworking, etc.) which has fundamental consequences in resolving the issues of employment, transport and the environment. Another example can be e-learning which offers an alternative to current education systems (physically attending educational establishments at times set by the institutions) making it independent of time and available space considerations and flexible enough to suit any pace according to a citizen's capabilities and requirements, etc. A road to lifelong learning is opened up in this way, which will become increasingly more important in the future, and for which the current traditional educational system is not suited. Broadband will also become important to provide other activities which are unknown to us today and which we will need in future. Such activities will become apparent as the information society and knowledge economy develops.

The measurable advantages ensuing from broadband Internet access are currently the following:

- easier and quicker search for information—information is widely available without location and time restrictions,
- support for lifelong learning without geographic or social barriers,
- simplifying mutual contact between citizens, companies, businesses, the public administration and other organisations,
- creation of new possibilities on the labour market (e.g. the possibility of working from home),
- more efficient company management, particularly in case of small and medium-sized enterprises, leading to an increase in their performance and subsequently their competitiveness,

- new possibilities for entertainment and cultural life,
- improving the quality of life for people in rural and remote areas including the support of remote areas by stimulating travel and tourism.

### **3. Broadband limitations**

In this Strategy broadband is understood in the same way as it is portrayed in the “State Information and Communications Policy (e-Czech 2006),” that is as a type of access for users for providing sources and services which does not limit end-users in terms of what they wish to do and when they wish to do it (i.e. it is not a “bottleneck” in the chain between the end-user and the service provider and various network sources, and it is continuously available, 24 hours a day, 7 days a week).

The Strategy considers this to be a generally correct definition of broadband access. On the other hand it should be accepted that such a definition cannot be applied for evaluating its practical aspects (various comparisons, evaluating statistics, quantifying goals etc., for example). It is therefore necessary to expand this general definition, pursuant to the State Information and Communications Policy, with an extra specific section which will contain specific quantitative parameters. At the same time it must be expected that this second part of the definition (as opposed to the first part) will be gradually changed according to how user demand and the services and applications used will grow. The Strategy cannot however precisely forecast this growth. Nonetheless it regards as necessary for these quantitative parameters to be increased as quickly as possible.

The main quantitative parameters for broadband access include both the nominal transfer rates and the actual transfer rates achieved (so-called effective transfer rates). The Strategy considers that there should not be a significant difference between these two rates; otherwise the usage for end-users would be considerably reduced. It considers that the minimum level rate of broadband access for 2005 to be 256 kilobytes per second. At the same time it expects that the actual achieved rate (effective rate) should not be a long-term average of less than 80% of the nominal rate.

The Strategy also takes into account the fact that broadband usage as provided by service providers may be constrained in relation to specific restrictions defined in the so-called Fair Use Policy (hereafter only the “Policy”). This is most frequently a restriction in the amount of data a user may transfer in specific time intervals (e.g. per week, month, etc.). It understands the existence of such Policies as being a type of, probably temporary, economic and technical compromise, which may increase the availability of broadband for users at the current time. On the other hand the Strategy expects that such Policies should restrict users as little as possible and their restrictive nature will disappear over time. The Strategy considers it entirely unnecessary for each user to be made acquainted with the existence and precise content of such Policies, and that the Policies should always be clearly, completely and comprehensibly defined for end-users.

### **4. The current situation in the CR and future development trends**

At the end of 2003 and beginning of 2004 the broadband situation in the CR improved. One of the commitments of the “State Information and Communications Policy” was thereby fulfilled, as was one of the goals which the country undertook as part of the eEurope+ initiative: to provide its citizens with generally available (low-speed) access to the Internet. This goal was achieved with the aid of mobile connection (based on GPRS technology) using a fixed regular fee payment system. A regular fee payment method for end-users however was still not available for dial-up connections. Attempts to introduce at least the so-called interval fee (at mid-year 2004) proved to be unsuccessful. Demand for low-speed connection still exists in the CR to a certain extent. According to experiences abroad, saturation of low-speed service is a pre-condition for the expansion of broadband access.

According to the results of the statistical survey by the Czech Statistical Office (CSO), “Computers and the Internet in Czech Society”, published in April 2004, as well as other relevant research, low-speed Internet access penetration for households in the CR ranges between 15–20%, which is roughly between one third and one half of the average penetration in the EU. The data from operators and public opinion polls is more optimistic, stating a level of around 40%. In spite of this the Gov-

ernment considers the situation to be alarming. This situation is not caused by the (physical) unavailability of low-speed access but by the insufficient purchasing power of the population compared to prices and also by the low motivation to purchase even this type of connection. Put briefly: The current range of services offered (in terms of content) is not sufficiently rewarding for users for it to motivate them to purchase broadband connections. The solution therefore is, on the one hand, to increase the prosperity of the whole country together with an increase in purchasing power, and on the other hand, to increase the availability of content which is attractive to users also using the aid of low-speed connections.

#### 4.1. Broadband access situation

According to results from the afore-mentioned CSO research (“Computers and the Internet in Czech Society”, published in April 2004), at the beginning of 2004 broadband access penetration for CR households was very low: 1.5 to 2% of households. This was significantly less than in developed EU countries. According to the CSO the level for businesses was about 20%, i.e. roughly half the average of the EU (39%). At the end of 2004 there were over 100,000 ADSL connections via fixed networks using normal telephone lines, and the number of customers using cable television connection was close to 60,000. There was a sharp increase in mobile connections in the second half of the year, when the largest mobile operator, Eurotel introduced its CDMA service on the 1st August 2004 (the first operator to do so in Europe). At the end of the year the number of users of this service exceeded 28,000. In November the mobile operator T-Mobile Czech Republic started to operate Internet services via its EDGE technology. Users of fixed wireless application (FWA), over 60,000 in the CR, should be added to the list of significant groups of users of broadband Internet, as should those using other types of access (LAN, WAN), who are mostly customers of small local operators. The numbers in this last group however are quite large—experts speak of around 150,000. As at the end of the year the total number of broadband connections to the Internet in the CR reached an estimated 400,000.

The main causes for this situation are as follows:

- insufficient availability of broadband, particularly outside large towns,
- unfavourable ratio of the price of broadband access to the purchasing power of the population,
- negative experiences of existing users with a low quality of services offered (which do not have a guaranteed nature—in particular services based on xDSL technology),
- insufficient range of services and content and subsequent insufficient motivation for users to purchase this type of access,
- insufficient awareness—both end-users and service providers are unaware of the advantages of broadband access,
- low level of compatibility of household PCs.

#### 4.2. The current forecast for developments in 2005

In the immediate future the following developments for access can be realistically expected. It is probable that there will be a convergence and close interlinking of the various methods of providing access. It can be expected in particular that the advanced sale of wholesale services (connection) will be used for providing the various types of connection and also of interconnection between service providers. Broadband users will gradually receive electronic communications services including image transfer (including all television modifications), data and sound including IP telephone services.

Television Cable Distribution: The number of areas offering cable access will slightly increase in 2005. The overall number of cable television connections at the end of 2003 was around 1.2 million. The number of these connections actually used was roughly 800,000, with UPC registering 370,000 users, Karneval 280,000 users and the rest being divided between the other 95 operators (mostly regional operators). The total number of broadband connections made using cable television networks at the end of 2004 was around 60,000. It is expected that at the end of 2005 the number of users using this type of connection will continue to rise, with the rate depending of the price and quality of the services offered by the operators. This technology can only provide broadband access at a restricted level which is governed by the actual presence of television cable networks in specific areas.

Digital Subscriber Line technology (xDSL): Over 100,000 users in the CR were connected using this method at the end of 2004, and the rate of growth in the future is expected to be faster than those using television cable networks, with this rate increasing dynamically. The advanced sale of wholesale services model will also be used for providing xDSL access by Český Telecom, a.s., as will the interconnection between operators model and a variation of installing xDSL technology on hired subscriber lines. It cannot however be expected that this technology will provide country-wide broadband access, due to both economic and technical reasons: Installing xDSL is only profitable in areas with a sufficiently high concentration of potential users and, on the technical side, it cannot be installed on subscriber lines which are too long.

Fixed Wireless Networks: Local broadband availability in larger and smaller towns will also be provided by a selection of variations of fixed wireless technology (e.g. Wi-Fi, and the newer WIMAX), which work on either the community model (as so-called community or neighbourhood networks), or as networks operated by telecommunications operators. For this reason it is nearly impossible to estimate the extent of such networks. The highest growth is expected in the unlicensed 2.4 GHz frequency band and later also in the 5 GHz band. A restricting factor will be the level of concentration in these unlicensed bands and the related interference. As regards to the licensed bands, development can be expected in particular in the 3.5, 26 and 28 GHz frequency bands, but this will be limited mainly by the extent of the granted frequencies and their usage. These types of networks can also successfully provide broadband access in suburban and rural (sparsely populated) areas.

Mobile Wireless Networks: A breakthrough in mobile broadband access was made by the commencement in August 2004 of data service operations in mobile networks using CDMA technology in the 450 MHz frequency band. This service can provide local broadband access at rates which, under certain circumstances, fulfil the current requirements for broadband access. This represented the start of the first wave of countrywide availability of broadband access. The use of EDGE technology in existing GSM networks may also have initial advantages (this does not however fulfil the transfer rate parameters for broadband access).

Fixed Satellite Networks: Broadband Internet access using satellite type wireless networks does not currently play a significant role for household connections. In view of its pricing and other parameters it is mostly used by large and medium companies and companies in areas which have a zero or reduced access to other types of technology.

### **4.3. The long-term outlook**

The introduction of third generation mobile networks in the CR can be expected in 2006. These networks are already considerably orientated towards providing data services which may have, but do not have to have, broadband characteristics (depending on the level of mobility of the user, the nature of the services provided, etc.). It can however be expected that the coverage of third generation networks will not be fully country-wide for a certain period of time, and will be restricted to areas with higher concentrations of users. Furthermore the potential to increase the transfer rates for this type of network is already restricted in advance by the technology used for 3G. The future range of services provided by third generation networks can be considered as being one of the favoured variations of broadband access, but it does not however by itself ensure country-wide access or a gradual increase of transfer rates and other parameters, according to increases in user requirements. Metallic networks and to a larger extent optical networks still represent the best actual potential solutions for broadband access requirements for stationary users.

## **5. Basic principles for state support**

The transformation of the existing public telecommunications networks and the construction of new networks is a long-term process. In order to achieve the best and lasting results efforts to support the development of broadband in towns and throughout the countryside must be made at a national level. This is the only way that the necessary conditions for overcoming the various problems involved in broadband development can be created. The Government is therefore intending to commence the targeted support of broadband development, whereby it will attempt to be technologically neutral to the

highest possible extent, and in particular will not make any decisions which are dependent on certain technologies or oriented towards a particular technology, and it will not give priority to any specific technology.

The Government is aware that the market for broadband is currently not very well developed. The only satisfactory aspect is the state of the backbone networks which have sufficient optic fibre and other transfer capacity. The Government does not consider direct state intervention necessary in this field. The situation for some access networks is however very unsatisfactory. Many of the existing networks are not sufficient or suitable for broadband or its development due to either their technical parameters, their state of repair, their quality or simply their absence in some areas. This situation acts as a brake to attempts to achieve the specified goals. There is very little construction of new networks in progress due to the high financial and organisational demands involved and the low motivation of potential users, low purchasing power of the population, unfavourable investment climate and lastly the unattractive pricing set by domestic operators, even when this is compared to some western European operators.

The Government considers the range of services which would require broadband as being a key factor. The experiences of countries with more developed broadband markets clearly show that a basic pre-condition is the existence of services and content which becomes the motivating factor for the establishment of broadband infrastructure. Currently it is the entertainment sector and the related services which provide the main content element for broadband use in the CR, therefore the Government intends to aim its direct state support towards education, culture, healthcare and public administration electronic services. After a transitional period it then intends to support separate infrastructure projects (metropolitan networks) under certain specific conditions, and only for projects which will fulfil the special criteria (see Chapter 6).

### **5.1. The state as regulator and creator of the legislative environment**

Pursuant to the concepts set out in the State Information and Communications Policy, the Government does not consider it practical for it to intervene in the activities of private operators (either fixed line or mobile operators), or in the building or their networks (access or backbone), or co-participate financially or otherwise in private operators, or even for the state to build and operate networks itself.

The Government does however deem it necessary for the state to be actively involved indirectly in these fields by:

- diligently adopting and fulfilling new European electronic communications regulations (the Electronic Communications Act was passed by the Chamber of Deputies of the Czech Parliament on 17 December 2004 and passed on to the Senate),
- improving the legislative environment by removing various legislative and administrative obstacles which stand in the way of developing competition in the electronic communications sector,
- improving the overall investment climate, which would support private sector investment,
- removing regulation in areas where it is not practical and does not contribute to developing markets and improving the availability of services to end-users.

### **5.2. The state as service provider**

The state is a significant provider of e-government services which have great potential to motivate citizens to use the Internet, including broadband, and also to increase demand for the services it offers. This therefore provides a wide platform on which specific projects can be built, such as providing access to the national cultural heritage using multimedia displays, opening access to public records, developing the public administration Portal and other portals, and supporting other activities typical for an information society such as e-learning, e-government, e-business and e-health.

In keeping with the concepts of the State Information and Communications Policy, the Strategy considers it necessary for the state to actively develop the e-government services provided by the public administration and to also support the development of services provided by local government (in particular in towns and cities).

The Government will complete the transactional section of the public administration Portal by the end of 2006 so that it will be possible to process the following activities remotely:

- basic life events
- tax returns and payments of personal income tax
- applications for issuing personal documents (identity cards, passports, etc.)
- change of address on-line and at one location
- applications for social benefits
- public healthcare services
- social and health insurance payments for employees
- tax returns and payments of corporate income tax
- excise duty statements and payments
- submitting statistical reports
- electronic customs declaration
- consulting of basic registers

The Government will also complete the connecting of all public libraries to broadband access by the end of 2006. As part of its support of providing access to the national cultural heritage it will continue the digitalisation and subsequent opening of remote access to the archives and collections of the National Library, the Museum of Czech Literature, the National Museum, National Gallery, etc. The Government will

Also connect up all schools with broadband access so that it can be used in the educational process and provide the basis for development of and access to educational content, also by the end of 2006.

At the local government level or non-profit organisation level, the Government will support the development of e-government applications by way of financial co-participation using the Broadband Development Subsidy Title (see Chapter 6 for more detail). Priority for State support will be given to projects which will create demand for broadband from different types of users, in particular for healthcare, education, culture and those processing local government matters. In terms of legislation, the Government will enable electronic delivery (the Delivery Act) and create legal and material conditions for the exchange of data with the public administration, and ensure the connection of the different public administration reference records.

### **5.3. The state as a customer**

Public administration bodies, including cultural and educational establishments, also use broadband Internet access, and thus become customers themselves. Their behaviour in this role can considerably influence events on the broadband market and its development. The intensive use of broadband by the public administration can become one of the most significant impulses to developing the market, technological innovation by service providers and for creating infrastructure which will cover the whole country.

Therefore, this Strategy, in keeping with the State Information and Communications Policy, deems it necessary that, in its role as a customer, the state should behave in a manner which would intentionally stimulate market development and support competition on this same market, particularly by building up demand. At the same time the Government has declared that it intends to avoid any steps leading in the opposite direction, included granting any sort of exclusivity. It also declares its intent that by 2006 it will reach a level at which all state institutions will be connected to broadband Internet access, and will then be capable of administering most of their business remotely. At the same time the Government will continue in passing amendments to the law which would lead to electronic communication reaching the same level as that of traditional paper communication, and then gradually starting to replace paper communication.

### **5.4. The state as a provider of direct support**

In accordance with the State Information and Communications Policy, the Strategy regards direct financial support as being an extraordinary and transitional instrument. The Strategy anticipates that it will be used only as a one-off initial step compliant with the principles of EU policy (COM/2004/369–Connecting Europe at High Speed: National Broadband Strategy), and in only two

areas: firstly for activities initiating the supply of access to networks in so-called problem areas, i.e. regions in which a market supply does not currently exist, and secondly for activities which initiate demand, including projects which support the development of broadband content and services.

**The Supply of Network Access:** The Government considers that the unsatisfactory network access situation should be resolved by more efficient use of existing networks and by providing support to the construction of new networks. Regarding more efficient use of existing networks, the Government supports the sharing of networks based on standard market principles and including equal access to subscriber lines, which has already been provided for by legislation. The Government considers direct support to new network construction as only being suitable in special cases, and only in areas where standard market mechanisms have not yet created suitable conditions and do not provide sufficient resources for building new networks. In practise this means supporting networks

and local distribution networks, particularly in less densely populated and less developed regions in the CR. Specifically this involves support for city or town networks which will be owned by the town or city and will work on the “town owns the infrastructure” principle (optics, hotspots), while the operator uses it to provide services. A condition for this will be that access to the infrastructure will be open, with all operators having the same opportunities. A further condition will be the pooling of funds for constructing these networks, i.e. state funding together with the actual owners (city/municipality) and the relevant region, and the provision of the necessary administration and maintenance.

**Accessibility of Services:** As well as the measures it will take itself (see point 5.2), the Government would like to support the development of broadband content and services by co-participating financially in projects at a public administration or non-profit organisation level. Such projects will stimulate the demand for broadband from different users, in particular in the fields of healthcare, education, and culture and also for dealing with self-government business.

## 6. Financing direct state support

The majority of the costs for constructing new and modernising existing networks capable of providing broadband access will come from private sector investment from companies involved in electronic communications. At the same time the relevant end equipment will be provided mostly by the end-users themselves from their own resources. The Government is considering two possible sources of financing for direct support from the public budget for projects for city and town networks or local distribution networks and projects supporting content and services:

**Structural Funds and other EU Instruments:** The main financial instrument for supporting cohesion and regional policies is the European Regional Development Fund–ERDF. Drawings from this fund are made based on submitted projects which correspond to the given operational programmes. For the period 2004–2006 the Czech Republic has prepared five operational programmes, with information and communications technology (ICT) projects being particularly supported as part of the Joint Regional Operational Programme (JROP). The managing authority of the JROP is the Ministry for Regional Development, with the Regions, or the individual NUTS II cohesion regions, playing a significant role in its implementation. As part of JROP the measures–Regional Development of Information and Communications Technology are aimed at supporting ICT. These measures for the basis for the construction of local and regional communications networks, the provision of public Internet access points (so-called PIAPs) and in particular the introduction of broadband access in structurally less-favoured and economically less developed regions. It is also possible to support the setting up of new ICT services and applications (e-government) for citizens. Only public bodies can be beneficiaries of this support, i.e. municipalities, regions, associations of municipalities, organisations established by regions or municipalities, or non-governmental non-profit organisations. These bodies must also be the owners of everything which is constructed using contributions from the structural funds, and must remain the owners for a minimum period of five years. Applicants of projects submitted as part of these measures may receive up to 75% of the total eligible costs.

Further EU sources for supporting services for the information society include in particular the IDABC, eTEN and eContent Plus programmes. The goal of the IDABC (2005–2009) programme

is to identify, support and promote the establishment and development of cross-boarder e-government services, including the related inter-operable electronic data networks which will support member states and the EU in implementing EU policies and activities and will provide direct advantages for businesses and citizens when they contact the various bodies of public administration. The eTEN (1997–2006) offers a host of possibilities mainly for public administration, but also for businesses and non-profit organisations. The main goal is to support information and electronic services which are beneficial to the public. The eContent Plus programme (2005–2008) is aimed at making access to digitally broadcast content and its use at the society level easier, improving the quality and increasing the level of best practices related to digitally broadcast content, and at strengthening co-operation between subjects interested in its broadcast and increasing awareness of digital broadcasting in general.

**Broadband Development Subsidy Title:** The Strategy anticipates that the Government will approve the establishment of a “Broadband Development Subsidy Title” (hereafter the “Subsidy Title”), coming under the Ministry for Informatics, chapter 338. The rules for its working will be compatible with those for using EU structural funds so that it will be possible to use resources from the Fund to top up financing. The Government will deposit 1% of the proceeds from the privatisation of the State’s share in Český Telecom a.s. for the Subsidy Title. Financing under the Subsidy Title will be used, for instance, to co-finance infrastructure projects for metropolitan and local networks, with a condition always being financial co-participation by the relevant regions and the entity carrying out the project, with the infrastructure in question being open to all operators. The Subsidy Title will also co-finance projects for broadband content and services. Contributions may be drawn for costs of both the construction and the first year of operations. Priority will be given to support for projects which will stimulate demand for broadband access from different users (e.g. healthcare, education, municipal bodies, commercial entities, etc.) in specific areas, and projects which will provide a higher economic effect of investment.

## **7. Other measures for supporting broadband**

The Ministry of Informatics will initiate the setting up of a Broadband Forum of experts which will address in greater detail and at expert level issues of broadband access and its development and support. This Forum will be an advisory body to the MI CR. Its members will include representatives from service providers, end-users, experts from public administration and academic circles and independent individuals. The Forum’s main task will be to further develop this Strategy, to regularly draft up-dating proposals and to publish further recommendations for broadband development in the CR. It will evaluate the content side of projects applying for co-financing under the Broadband Development Subsidy Title and make recommendations related to the fund. The Forum will monitor the overall development of broadband throughout the world and will make efforts to transfer successful thoughts, ideas and entire projects to the CR. The Forum will also determine the content for the National Broadband Server.

A National Broadband Server will be created on the Public Administration Portal which will be aimed at educating and informing interested parties, and at monitoring and benchmarking, etc. It will be operated and financed by the MI CR and its procedures will be governed by the Broadband Forum. Amongst other functions, the Server will ensure that broadband penetration in the CR will be monitored and mapped. It will also be used to provide information on the availability of broadband throughout the territory of the CR (aggregate supply). The Server will contain applications for end-users to express their interest in broadband in specific areas (for aggregate demand) and will provide education and information on the significance and advantages of broadband access and services, etc.

The Government also intends to actively stimulate demand for broadband access and services by using information literacy education and by supporting training activities aimed at increasing the information literacy and computer skills of all sections of the general public.



## 8. Goals and timetable

The Strategy's main goal is for the CR to achieve a level of about 50% of the population using broadband by 2010 at the latest. It projects the following timetable for the various specific broadband supporting measures:

- Establishment of the Broadband Development Subsidy Title—funds to be allocated starting from the 2006 budget year
- Setting up the “Broadband Development Forum”—by the end of May 2005
- Creation of the “National Broadband Server”—by the end of May 2005

## 9. Conclusion

This Broadband Strategy is a document issued by the Government of the Czech Republic which contains State measures and procedures for the broadband issue. Its aim is to support the development of broadband whilst preserving market economy principles and taking account of the reality and possibilities of the Czech economy arising from the reform of public finances. For these reasons the Government has only defined in the Strategy goals which are realistically attainable within the given time frames and which will, in its opinion, lead to the same level of broadband service prevalent throughout the EU being achieved in the CR by 2010. This Strategy has been subject to detailed public discussion between experts in the field, operators and the predominating political forces. Fulfilment of the Strategy will be regularly evaluated at Government level and the Government is also prepared to react to developments in the market for broadband access as they occur.

## Appendices

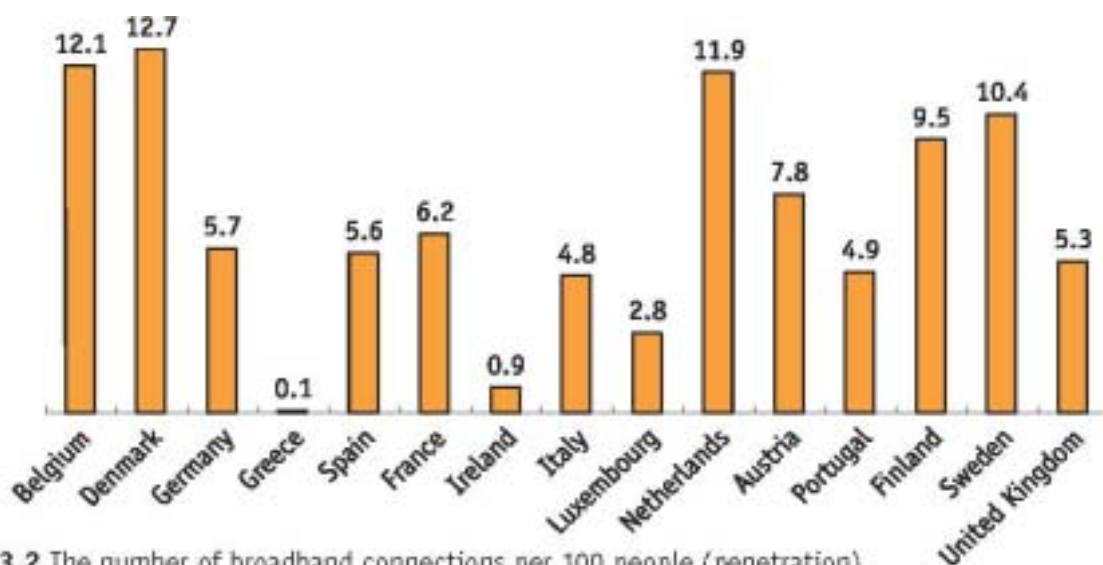
### A/ the current state of internet access in the eu and the world

At the end of 2003 the total number of broadband connections (made by Digital Subscriber Line technology

- DSL and cable modems) throughout the world was 100.8 million. This is an increase of 62.8% compared with the end of 2002, when this number was 62 million.

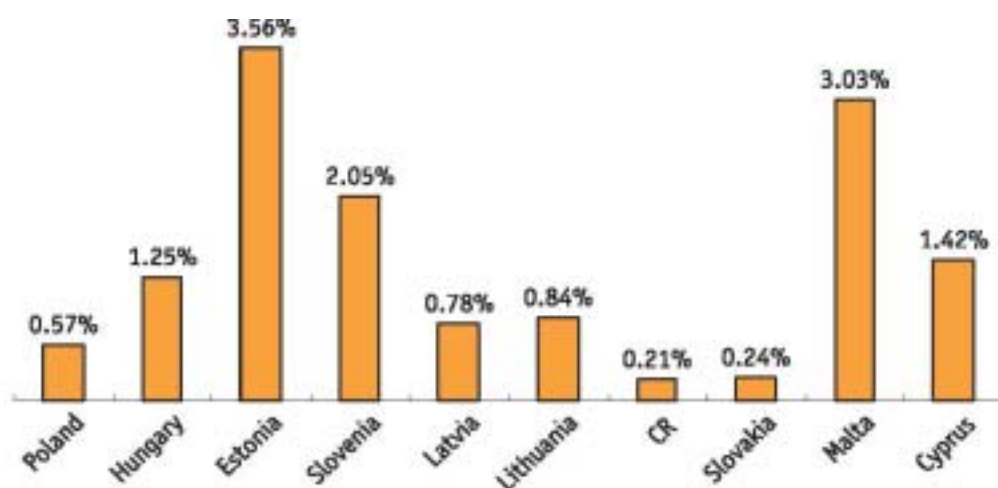
#### *Internet connections in eu member states*

The current situation for the number of broadband connections per 100 people in EU-15 member states is set out in Figure 3.2. The situation in the new accession countries, characterised by a growth in the number of broadband connections by ADSL technology, per 100 people for the 1st Quarter 2004 is set out in Figure 3.3.



**Figure 3.2** The number of broadband connections per 100 people (penetration)

Source: European Commission

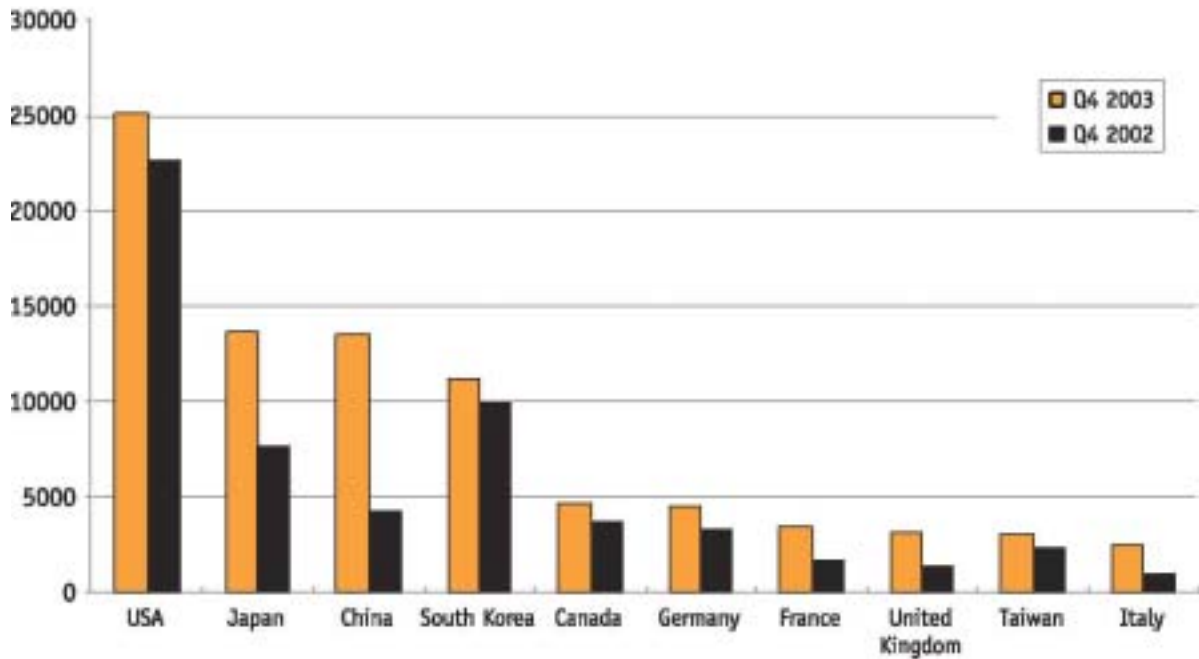


**Figure 3.3** The number of broadband connections made by ADSL technology per 100 people for 1st Q 2004 in countries which have newly joined the EU

source: Point Topic

*Internet connection state throughout the world*

Figure A.1 shows the ten countries with the highest number of broadband connections as at the end of 2002 and 2003. The highest number of connections per 100 people (penetration) was in South Korea, 23.1%, followed by Hong Kong, 17%, Canada, 14.7%, Taiwan, 13.3%, Denmark, 12.7% and Belgium, 12.1%.



**Figure A.1:** Countries with the highest number of broadband connections Source: Point Topic

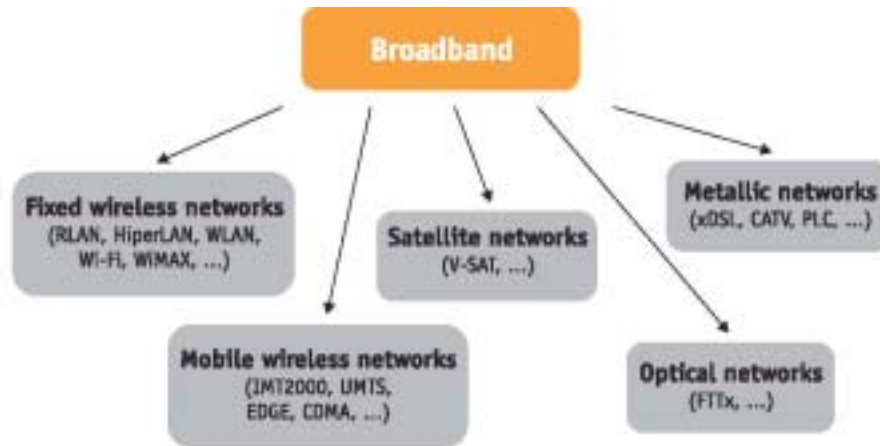
	ADSL	CATV	FTTH	PLC	WLL	3G	Družice	Celkem
Belgium	765183	477745	0	0	0	0	0	1244736
Denmark	473193	194318	0	0	2171	0	0	678698
Germany	4498086	60000	56000	8200	0	0	45171	4667457
Greece	8588	5	0	0	362	0	0	10006
Spain	1676466	539754	881	0	5158	0	757	2228169
France	3262800	393854	0	0	0	0	0	3656654
Ireland	25180	4900	0	0	1000	0	200	34880
Italy	2158458	20	146835	0	179	337400	90617	2739139
Luxembourg	10869	1327	0	0	25	0	0	12439
Netherlands	978044	930000	0	0	0	0	0	1908044
Austria	279500	338000	1000	0	0	0	0	618500
Portugal	184860	305577	0	0	0	0	0	500437
Finland	405600	85400	100	620	2600	0	20	494340
Sweden	555113	175400	160400	400	3200	20000	0	919513
United Kingdom	1804609	1359000	0	0	2500	0	6000	3172109
<b>Evropa EU-15</b>	<b>17086549</b>	<b>4865300</b>	<b>365216</b>	<b>9220</b>	<b>17195</b>	<b>357400</b>	<b>142765</b>	<b>22885321</b>

**Table A.1** Broadband connections via various technologies (January 2004) Source: European Commission

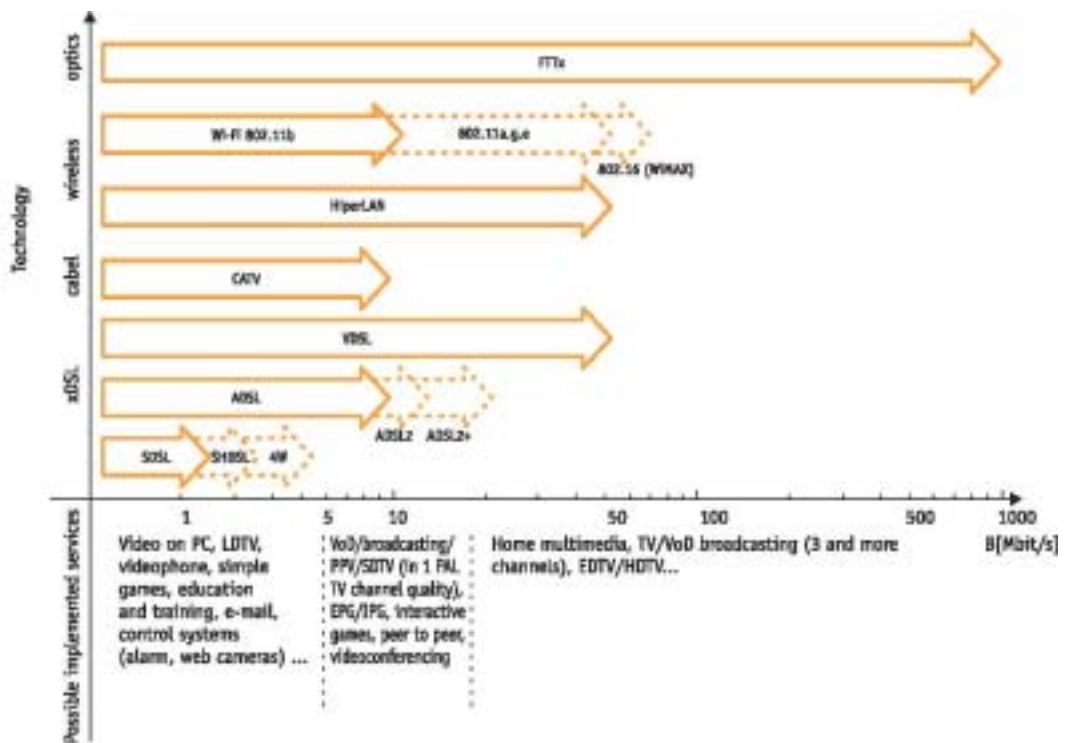
**B/ technology for broadband access**

Considerable progress has recently been noted in the development of technology enabling broadband access. In the short-term, various technologies will be implemented which will exist side-by-side and which will mutually compliment each other.

The systems used for access via subscriber lines are particularly designed for symmetrical metallic cables used for telephone connections and co-axial cables used for cable TV services. Another possibility is to use the virtually ubiquitous electricity distribution network. The last option is to install optical fibre right up to the subscriber. Under our conditions this is currently only something for the future as it requires the construction of entirely new access infrastructure and subsequently involves relatively high implementation costs. Wireless technology includes fixed wireless systems, mobile wireless systems, fixed satellite systems and wireless local networks (WLAN). Figure 4.1 shows the general different technologies for broadband access.



**Figure 4.1:** Various technologies enabling broadband access. Broadband access technologies can generally be separated into those which enable access via subscriber line and those via wireless access.



**Figure 4.2:** A comparison of technologies enabling broadband access

Figure 4.2 shows a graphic comparison of technology in terms of achieved transmission rates and their usefulness for various types of services.

*Digital subscriber lines*

Digital subscriber line technology, generally known as xDSL, includes a number of types of systems which are used to set up broadband connections via subscriber lines in existing cable networks. This technology is designed to modernise the existing networks of traditional telephone network operators who wish to provide broadband access to the Internet. The basic types of DSL include the basic ISDN, High-speed Digital Subscriber Line (HDSL), Symmetrical Digital Subscriber Line (SDSL), Asymmetrical Digital Subscriber Line (ADSL) and a DSL with very high transfer speed (VDSL).

Table B.1 shows the maximum transfer rates for various DSL technologies. ADSL is currently the most used system and is designed for households and small businesses due to its asymmetrical transfer. Second-generation ADSL systems known as ADSL2 and ADSL2+ have recently started to appear on the market. These systems use more advanced techniques for processing signals and support a host of new functions which enable services to be provided more reliably, more effectively and more cheaply. As opposed to ADSL, the SDSL technology is designed more for small and medium-sized enterprises which require the same transfer speed for both directions. ADSL and SDSL reach is generally considered to be 3 km from the exchange (the actual reach of different connections depends on many factors, e.g. average core diameter of the subscriber line or the number of DSL systems attached to the same cable). VDSL technology enables symmetrical and asymmetrical transfer however the reach is about 1 km from the central switchboard. This means that subscribers must either be very close to the exchange or optical fibre cable must be installed deeper into the network so that the connection section using metallic cable is shortened, which then enables the use of the VDSL full capability, i.e. transferral rates of tens of Mbit/s in both directions.

Name	Speed (Mbit/s)	Distance (km)
Dial-up modem	0,056	-
ISDN	0,128	-
SDSL	1,5	3 - 7
SHDSL	2,3	3
ADSL	10	3
ADSL2	12	3,3
ADSL2+	24	1,5
VDSL	52	0,3 - 1,2

**Table B.1:** Maximum transfer rates of various DSL systems

The main problem with DSL systems is cross-talk interference which affects its reach and its performance. Cross-talk interference has a considerable effect on the maximum transfer rates for specific lengths of subscriber line. Generally speaking, any increase in the number of DSL systems on a single cable will decrease its transfer rate and reach. Basically, this is a problem of shared frequency spectrum within the cable, because the effect of cross-talk interference depends on which frequency band is used by different pairs of cables.

*Cable television*

HFC technology (a combination of fibre optic cable and coaxial cable) and cable modems for access via cable television networks is an important competitor to ADSL technology in countries which have well developed cable television infrastructure. This technology supplements xDSL well because it provides a simultaneous transfer of TV signals and data, voice and interactive services. Users have shared Ethernet type access and the actual transfer capacity depends on the number of simultaneously connected subscribers. The transfer rate of a channel to a subscriber which is usually shared between 200 to 500 subscribers is 39.912 or 55.616 Mbit/s. The transfer rate of a channel from the subscriber is at most 10.24 Mbit/s.

*Electrical power lines*

PLC technology (PowerLine Communications) is a relatively new method of broadband access to the Internet which uses electrical power distribution cables. Low voltage power lines however are a very low quality medium for transfer due to the large number of branches causing similar amounts of inhomogeneity in the signals path. This results in unacceptable levels of interference to mobile communications in some frequency bands. At higher levels this also causes attenuation and disruption of transmission. This means that PLC technology is only useable for distances of a few hundred metres. Overcoming these disadvantages requires considerable investment into the technical quality of the equipment. Unless corresponding standards are set up, which would set the frequency band, the

maximum broadcasting level and the density of the spectrum distribution this technology will not be practical.

### *Optic connection*

An optical connection via fibre optic cables represents an unrivalled solution to broadband Internet access, due to its technical and operational parameters. Optical cables, either single or multi-mode fibres, are clearly superior in comparison to metal cored cables. They have a considerably lower attenuation factor than metal cored cables and can therefore effectively bridge much wider distances (up to tens of km, according to the type of fibre). Fibre optic cables have the distinction of being immune to electromagnetism (therefore there is no external interference to the signal) and can transfer signals at high speeds (up to 10 Gbit/s). It is also very difficult to eavesdrop on the transferred signals (data transfer security).

We differentiate between the types of connection according to where the optic fibre terminates:

- FTTH fibre to the home—the fibre terminates at the optical terminal at the end-user equipment (computer) at individual apartments. This solution is suitable for complete optical connections.
- FTTB fibre to the building—the fibre terminates at an optical junction box. This solution is suitable for connections to LANs for example.
- 3) FTTC fibre to the curb—the fibre terminates in a cabinet in a cable access trench under the pavement at an optical junction box. This solution is suitable for terminating (leading out) the optic fibre at a specific point within the cable network.

These variations describe the various ways optical fibre may be terminated at various points within a cable network. It is logical from a technical and operational point of view that the most suitable method would be FTTH, which more than fulfils all the requirements for connecting subscribers to broadband Internet. The negative side is the price of the optical connection which is still high in spite of the fact that prices for optic fibres have fallen over the past ten years and indeed continue to drop. The fact that the purchasing power of households is increasing on average is one factor which leads to the expectation of a possible growth in expenditure on electronic communications services. It can therefore be expected that at some point in time there will be a regular use of optical cables using the “optic fibre as close to the subscriber as possible” principle for broadband access to the Internet in the CR. In this way the issue of transfer speed for CR users of networks based on IPs and other networks and services will be resolved in the long run in a manner which is today common in many developed countries in the EU and throughout the world.

### *Fixed wireless access*

The technology used for fixed wireless access (FWA), which includes various systems (e.g. LMDS, MMDS, NLOS or the new HAPS), uses various frequency bands from 1 to 60 GHz and is designed mainly for operators who do not have their own cable infrastructure. FWA is particularly suitable for areas with no access to fixed subscriber lines. These systems provide broadband Internet access for a set number of users via a base station which is connected to the Internet via a backbone network. The users are based from 1 to 35 km around the base station depending on the frequency band used. The transfer speeds provided range from 64 kbit/s to tens of Mbit/s. The disadvantage of these systems comes from the existence of different systems using various bandwidths and having various transfer capacities available. The situation is further complicated by different countries using different methods of assigning bandwidth spectrums and awarding licences. Licensed frequency bands of 3.5 GHz, 26 GHz and 28 GHz are used in the CR. Broadband Internet connection for users is offered either by the operators of the systems themselves or via other partners.

### *Mobile wireless access*

2nd generation mobile wireless access technology does not provide broadband access to the Internet. The 3rd generation systems were therefore designed which have transfer rates of up to 2 Mbit/s and which therefore do provide broadband Internet access to users. The original aim of ITU-R to reach agreement on recommending a single globally accepted 3rd generation mobile wireless system (in

ITU documents this is known as IMT-2000), was not fulfilled. After complex negotiations at an international level which were aimed at unifying activities in this field the ITU-R issued the M.1457 recommendation: “Detailed specification of the radio interfaces of international mobile telecommunications-2000 (IMT-2000)” which specified 5 radio interfaces which, amongst others, would fulfil conditions for data transfer rates of at least 2 Mbit/s. Consortia of world standardisation organisations was subsequently set up known as 3GPP and 3GPP2. These bodies are involved compiling detailed harmonisation standards for UMTS with variations for frequencies and time division duplex (including TD-SCDMA), enhancing the GSM mobile system using the terms EDGE, cdma2000, and UWC-136 and also enhancing the DECT European standard for wireless telephones. EDGE, the enhanced version of the GSM mobile system, can be introduced by networks gradually and can provide broadband Internet access with transfer rates of up to 553.6 kbit/s. UMTS uses in its terrestrial component parts of the 1900–2170 MHz frequency band and provides mobile users with broadband access at transfer rates of up to 384 kbit/s and up to 2 Mbits/s for users communicating from various locations via relocation (nomadic users). Networks which have a high speed channel specified according to 3GPP Rel. 5, can have transfer rates of up to 10 Mbit/s. cdma2000 1xEV-DO is a data version which is available in frequency versions which can replace virtually all 2nd generation mobile systems, including NMT. It provides broadband access with rates of about 2.4 Mbit/s.

#### *Fixed satellite access*

Systems which provide fixed satellite access use satellites on LEO, MEO and GEO type orbits. These satellites use L, S, C, Ku, and Ka type frequency bands, and also the V band which is more favourable for broadband access. The transfer rates range from 144 kbit/s up to tens of Mbit/s. It is not practical for use by households and small and medium-sized enterprises, mainly due to price considerations.

#### *Wireless local networks*

Systems for wireless local networks (known as WLAN or RLAN), which were originally designed for local computer networks have proved to be suitable for Internet access. WLAN systems are based on IEEE 802.11 specification using the unlicensed 2.4 GHz frequency band or parts of the 5GHz band. It enables Ethernet type access at distances of 30 to 100 m with shared transfer rates of 1 to 54 Mbit/s. The use of this technology is currently restricted by problems with reliability and security. The unlicensed ISM 2.4 GHz frequency band is also used by Bluetooth technology, which was originally designed as a substitute to cable connection for peripheral computers. The typical transfer rate is about 700 kbit/s and its reach at nominal 0 dBm performance is up to 10 m, and about 100 m under the enhanced performance regime. Bluetooth can be used for broadband connections of portable computers to the mobile wireless networks. Both these technologies, i.e. WLAN and Bluetooth, can be used with third generation mobile networks.

#### **C/ abbreviations used in the text**

3G	3 <sup>rd</sup> generation of wireless mobile systems
3GPP	3 <sup>rd</sup> Generation Partnership Project (UMTS)
3GPP2	3 <sup>rd</sup> Generation Partnership Project 2 (cdma2000)
ADSL	Asymmetrical Digital Subscriber Line
CATV	Cable Television
CDMA	Code Division Multiple Access
cdma2000 1xEV-DO	cdma2000 1 EVolution–Data Only
DECT	Digital European Cordless Telecommunications



EDGE	Enhanced Data rates for GSM Evolution
e-Health	e-Health stands for the use of modern information and communications technology to satisfy the needs of citizens, patients, health care staff, health care providers and managers
e-Learning	e-Learning stands for the use of new multimedia technology and the Internet to increase the quality of education by facilitating access to resources and services via remote exchange and cooperation
Ethernet	Unswitched local multiple access communication system responding to the carrier signal and detecting collisions. The packet length is 64-1518 bytes, broadband up to 10 Mb/s.
ETSI	European Telecommunications Standards Institute
EU	European Union
FTTH	Fibre To The Home
GEO	GEostationary Orbit
GPRS	General Packet Radio Service
GSM	Global System for Mobile Communications
HDSL	High-speed Digital Subscriber Line
HFC	Hybrid Fibre Coax
HAPS	High-Altitude Platforms Systems
IEEE IMT 2000	Institute of Electrical and Electronic Engineers International Mobile Telecommunications–2000
IP	Internet Protocol
ISDN	Integrated Services Digital Network
ISM	Industry Science Medicine
ITU	International Telecommunication Union
LEO	Low Earth Orbit
LMDS	Local Multipoint Distribution Service
MEO	Medium Earth Orbit
MMDS	Multichannel Multipoint Distribution Service
NLOS	Non-Line of Sight
NMT	Nordic Mobile Telephone
Optics	Optics or optical network are networks built on a fibre-optic infrastructure (optic

	fibres, passive and active optic elements)
P-PM	Point-to-Multipoint
PLC	Power Line Communications
SDSL	Symmetrical Digital Subscriber Line
TD-SCDMA	Time Division-Synchronous Code Division Multiple Access
TDMA	Time Division Multiple Access
UMTS	Universal Mobile Telecommunications System
Teleworking	Working at home using a computer and delivering the results via e-mail or working directly through a remote server using an Internet connection
UWC-136	Universal Wireless Communications-136
VDSL	Very high speed Digital Subscriber Line
WiFi	Wireless Fidelity
WIMAX	Wireless technology based on the IEEE 802.16a standard, working on frequencies between 2 and 11 GHz, enabling a high-throughput broadband connection over long distances
WLAN	Wireless Local Access Network
WLL	Wireless Local Loop
xDSL	x Digital Subscriber Line

## Information and links concerning eu financing of broadband internet access

### **[www.strukturalni-fondy.cz](http://www.strukturalni-fondy.cz)**

Official website of the Ministry for Regional Development on EU funds, possibilities for co-financing of projects from structural funds and the Cohesion Fund. All document are available on the website: operational programmes, programme complements, application manuals, application forms listing the compulsory attachments, and other fundamental information.

### **<http://www.micr.cz/eintegrace/programy.htm>**

Website of the Ministry of Informatics on Community programmes in the area of the information society (eTEN, eContent, etc.) containing up-to-date information on the programmes, and work programmes as well as important links.

### **[http://www.micr.cz/images/dokumenty/Obecne\\_zasady.pdf](http://www.micr.cz/images/dokumenty/Obecne_zasady.pdf)**

The “Guidelines on Criteria and Modalities of Implementation of Structural Funds in Support of Electronic Communications” is a Commission staff working paper from July 2003. The goal of the guidelines is to help the regions wishing to co-finance investment in the electronic communications sector via structural funds. The material contains information on the implementation procedure, i.e. on the tendering process, financing, ownership, transparency, determination of co-financing rates, evaluation, monitoring, and benchmarking.

# State Information and Communications Policy eCzech 2006

## 1. Introduction

In an effort to make the best use of the immense potential of modern information and communication technologies (hereinafter ICT), the Government of the Czech Republic has resolved to redefine the objectives of the state in the field of the so-called information society and in the area of telecommunications and formulate a new state strategy for the coming period, up to 2006.

Unlike in the previous approach when separate policies for both areas were produced (in the documents of “State Information Policy—a Way Towards the Information Society” and “National Telecommunications Policy”), the Government has decided to respect the narrow interconnectedness and the general trend toward convergence of both areas and develop one common strategy and policy document entitled the State Information and Communications Policy—eCzech 2006. Using that title, the Government reflects the change of telecommunications into electronic communications.

The Government is also undertaking the development of a new single policy with a view to the coming accession of the Czech Republic to the European Union. As an EU member state, the Czech Republic will join the updated European “eEurope 2005 Action Plan: An information society for all”. The proposed “State Information and Communications Policy” is therefore oriented primarily towards elaborating the goals and requirements of that policy document in the national conditions so that the Czech Republic could meet its obligations to the EU and at the same time take maximum advantage of the opportunities extended by ICT. The priorities of the eEurope 2005 Action Plan have not been automatically transposed into the State Information and Telecommunication Policy but they were reviewed in relation to the current situation in the Czech Republic. The task was to set the national goals in such a way as to consider the European priorities but at the same time to respond to the specific needs of the Czech Republic. For that reason, the following priorities have been set out, ranked by importance: affordable and secure communications services, information literacy, modern online public services, dynamic e-business environment.

After the Czech Republic is integrated into the single internal market, the Government of the Czech Republic anticipates increasing growth of the competitive environment pressures on restructuring of the national economy on both the macroeconomic and microeconomic levels. Along with that, a need arises to modernise and improve the efficiency of public administration on the central, regional and local levels. Efficient use of ICT may result in productivity and employment growth, quality improvement of the services provided and, last but not least, significant savings in public spending.

It is not the focus of the present policy document to elaborate the goals in individual sectors or assign partial tasks with specific deadlines. The main emphasis is placed on the values and principles the Government is going to apply in further developing the information society in the Czech Republic. Projects of public administration bodies aimed to fulfil the tasks under the State Information and Communications Policy shall be developed in accordance with the Act on budgetary rules and on the amendment to certain related acts (No. 218/2000 Coll.) and the implementing regulation of the Ministry of Finance No. 40/2001.

The Government regards the provision of secure, economically and geographically accessible modern electronic communications services as a prerequisite for the competitiveness of the Czech economy. Without a modern communications infrastructure, an equal position for the Czech economy within the EU cannot be secured. The above infrastructure is at the same time a prerequisite for the creation of a wide portfolio of information society services for citizens and enterprises operating on the territory of the Czech Republic.

Given the dynamics of ICT development, the Government of the Czech Republic considers it necessary to review the policy and update it as needed. Equally, it is noted that with regard to the dynamic developments of ICT that it is impossible to define the specifics of the target status to be reached by 2006. The Government views its role particularly in creating suitable conditions for information society development in the Czech Republic, giving technologically neutral support to information society services and eliminating possible undesired consequences and effects.

Currently, the government is going to place a particular focus on:

- building modern and secure public administration services available online,
- continuing liberalisation of the electronic communications sector with a view to ensuring an effective competitive environment that will result in reductions of service prices and support to investment,
- supporting the take-up of high-speed Internet access and ensuring its affordability for all groups of the population,
- continuing development of information society legislation wherever appropriate,
- supporting the increasing of computer literacy of the population,
- supporting the development of e-business by creating suitable technologically neutral conditions.

The Government regards other key areas of information society development such as copyright protection and personal data protection as sufficiently and adequately ensured at the moment. The Government is going to monitor European trends and take necessary measures in time.

## **2. Background**

At the Lisbon summit in March 2000, the European Council set the ambitious objective to turn the European Union into the most competitive and dynamic knowledge-based economy capable of sustainable economic growth with more and better jobs and greater social cohesion by 2010. Support to the building of the information society is considered as one of the key actions towards the achievement of that objective.

Subsequently, ambitious strategies and action plans for the development of the European information society were produced:

- member states' eEurope 2002 Action Plan,
- candidate countries' eEurope+ 2003 Action Plan,
- member states' eEurope 2005 Action Plan.

In 2001, the Czech Republic joined the eEurope+ 2003 Action Plan, a joint commitment of EU candidate countries in the area of information society development that was produced in response to the member states' eEurope 2002 Action Plan. In the coming period, the Czech Republic will focus on achieving the goals of the eEurope 2005 Action Plan.

### **2.1. Importance of the information society**

The policy statement of the Government of the Czech Republic embraces the goals set in the so-called Lisbon process. The Government of the Czech Republic regards the potential of ICT as an opportunity and chance to start up new and long-term, sustainable development of a knowledge-based society. It is going to use ICT as a tool to achieve growth in labour productivity and overall level of education, solve problems affecting the society as a whole, such as unemployment, inclusion of the disadvantaged and unbalanced development of the human potential.

The development, take-up and patterns of use of ICT became in previous years a basis for systemic, process and structural changes on all levels of governance of the society. In comparison with the past, new technologies and networks enable a completely different approach to and work with information resources, as regards quality and quantity. People are acquiring more and more skills necessary for working with new technologies and it is true for an increasing number of professions that a lack of such qualification is a reason for being disadvantaged or even excluded from the labour market. Provision of favourable conditions for efficient generation, administration and dissemination of information entails significant development potential on the level of small and medium-sized, but also large enterprises, state administration and local government. Among those conditions are also the available information and transaction online services of the public sector bringing concrete measurable effects to their users. The information society changes the ways of doing business, and access to services and goods to such an extent that sometimes the so-called new economy is mentioned.

New technologies present an opportunity to create modern and efficient public administration offering new or enhanced services resulting from reform of the previously applied procedures. Public administration is also a major market player, supporting both the development of and the demand for ICT products and services. Public administration services must be user-friendly and available to all, that is also to the handicapped or otherwise disadvantaged population groups. Modern public services must reflect the needs of their customers, i.e. citizens and entrepreneurs. Abuse of sensitive information must be prevented in the use of ICT and personal data protection must be consistently taken care of.

The Government is aware of the expansion of new information media and the number of new legal and ethical issues related to their development (e.g. protection of works disseminated over the Internet and copyright to them, dissemination of child pornography, etc.). Due to the worldwide nature of those issues, the domestic legislation concerning them must be consistent with internationally coordinated efforts to resolve them, as undertaken by the EU and worldwide organisations, such as WIPO (World Intellectual Property Organisation) or UNESCO.

The target of social inclusion policies is to remove and stop creating barriers of any kind of the involvement of individuals or groups of population in the active life of the society. Analogously, the newly used term of e-inclusion means a set of conditions for effective inclusion of all population groups in the information society. What must be prevented is further extension of the so-called digital divide, i.e. divide within states, regions, municipalities and population groups between the included and the excluded, that is those who benefit from the introduction of ICT and those who do not.

The Government therefore endeavours to create equal conditions and opportunities to include all population groups in the information society. For the disadvantaged population groups, achievement of information literacy may become a way to find their place in the labour market. That is why great emphasis is going to be placed on that aspect. Further, the principle of gender equality must be maintained with regard to possibilities to use the opportunities offered by the information society.

## **2.2. Authorities in the area of telecommunications and the information society**

Public authorities specialised in support and the development of the information society have been established in the Czech Republic since the mid-1990s. The Office for the State Information System (ÚSIS) was established by November 1, 1996, taking over powers of the former Ministry of Economy relating to the state information system issues. In 2000, as the Public Administration Information Systems Act came into force, ÚSIS was transformed into the Office for Public Information Systems (ÚVIS).

A government resolution from October 1998 established the Government Council for Information Policy, an umbrella body for information society activities that, inter alia, coordinated the later development of the “State Information Policy—a Way Towards the Information Society” and related documents.

Law-making powers in relation to telecommunications rested with the Ministry of Economy until October 1996 and then were transferred to the Ministry of Transport and Communications (MDS ČR).

The Czech Telecommunications Office (ČTÚ) that performed state administration including regulation related to telecommunications issues, was part of the Ministry of Economy until 1996 and then of the Ministry of Transport and Communications. By July 1, 2000, as the new Telecommunications Act came into force (Act No. 151/2000 Coll.), it became an independent administrative body under the authority of the Government of the Czech Republic.

Based on an amendment to the so-called Authorities Act, the Ministry of Informatics (MI ČR) was established by January 1, 2003, taking over powers relating to telecommunications (from the Communications Section of the MDS ČR), information society (full powers of the former Office for Public Information Systems that was abolished upon establishment of the MI ČR), and electronic signature (from the Personal Data Protection Office).

The competency of the Ministry of Informatics is defined primarily by the Public Administration Information Systems Act (No. 365/2000 Coll.) and Telecommunications Act (No. 151/2000 Coll.). The Ministry produces strategy documents drafts relating to the public administration informa-

tion systems, develops and administers the Public Administration Portal, coordinates and creates conditions to support the development of e-commerce, and evaluates projects with interdepartmental impacts on public administration information systems. Further, the Ministry is responsible for drafting legislation and policy related to telecommunications and laying down principles and guidelines for the regulation of the telecommunications market, and approves the frequency band allocation plan. It grants accreditation to operate as an accredited certification service provider in relation to electronic signature. It is the incorporating entity of the Czech Post state enterprise and on the basis of the Postal Services Act it is the regulatory body for the postal services market.

Introduction of information and communication technologies to public administration is also taken care of within the territorial public administration reform and modernisation of public administration, under the authority of the Ministry of Interior (MV). Further, the Ministry of Interior has a coordinating role in combating IT-related crime.

The building of e-government services may be described as a decentralised process the success of which depends to a significant extent on the support of all state and local administration bodies.

The Ministry of Informatics plays the role of coordinating the information society development in the Czech Republic on the supranational and international levels.

### **3. Priority Areas**

The member states' "eEurope 2005: An information society for all" initiative covers all priority areas expected to be achieved by 2006. They are modern online public services including e-government, e-learning and e-health services, a dynamic e-business environment, widely available high-speed connection at competitive prices, and a secure communications infrastructure.

The State Information and Communications Policy elaborates the content and priorities of eEurope 2005 in the following four priority areas, fully covering the eEurope 2005 priority areas and at the same time reflecting the specific position of the Czech Republic as an accession country which has yet to fulfill certain tasks from the preceding eEurope+ Action Plan for candidate countries.

The following four priority areas of the State Information and Communications Policy are ranked by importance attached to them by the Government of the Czech Republic:

- 1. Affordable and secure communications services: issues of electronic communications market regulation and enhancement of market competition including the transposition of the new European electronic communications regulatory framework; further, completing of the remaining tasks of the eEurope+ programme concerning the affordability of basic (so-called narrowband) as well as high-speed Internet services.
- 2. Information literacy: primarily issues of introducing ICT to schools and of information literacy, e-learning and overcoming of the digital divide.
- 3. Modern online public services: online public services, above all e-government, e-procurement and e-health services.
- 4. Dynamic e-business environment: government measures primarily in the area of legislation; matching the priority area of eEurope 2005 of the same title.

#### **3.1. Affordable and secure communications services**

The Government regards the provision of affordable and secure communications services for all citizens as a key priority. The general goal of the government is to reach a situation where the supply of communications services will not be a factor limiting their use but will rather stimulate demand for such services.

In order to reach such a situation, it is necessary to positively affect the overall electronic communications market development, develop the supply (availability) of services on that market and support security of the communications services provided as well as of the environment in which communication is taking place.

Last but not least, the affordability of communications services is affected by the overall economic situation, purchasing power of the population, attractiveness of the industry for investors, but

also education and information literacy supporting the demand for communications services, as well as other factors.

### *3.1.1. Development of the electronic communications market*

In line with the concept of the so-called relevant markets, the Government regards regulation as a temporary tool that may and is to be used just and only where there is no free competition, or where the market is not able to function and to develop only on the base of application of rules of fair competition. In line with the European regulatory framework and the Electronic Communications Act, currently under development, that will transpose that European framework, the Government will only define the principles and objectives of regulation and the practical application of regulatory mechanisms will continue to be an assignment of a national regulatory authority.

The Government assumes the issue of availability of telephone services in the Czech Republic to be basically resolved. By supporting the competitive environment, it is particularly going to support the reduction of the overall price level of telephone services and stimulate investment in the relevant infrastructure to prevent technological obsolescence of those basic electronic communications networks (take-up of Voice over IP, WiFi, etc.).

The basic development priority for the targets of the regulation policy for the coming period is to stimulate the development of data services. Based on experience from the previous period, the Government is going to apply the most precise regulatory policy possible focused primarily on the development of mutually competitive services based on technologically different infrastructures. The regulatory policy is going to support in particular those operators who will invest in the development of electronic communications infrastructure and guarantee them adequate protection of their investment. Price regulation will primarily target prices of interconnection between telecommunication services providers. Gradually, price interventions concerning prices on markets for end-users will be minimised. The key priority at regulation will be full transparency and connectivity of all public networks and mutual availability of the services provided.

The Government intends to define the principles and objectives of the electronic communications market regulation so that they:

- promote the interests of all users of electronic communications services and stimulate the use of those services by end-users,
- follow the principles of the new European electronic communications regulatory framework, including the concept of the so-called relevant markets, clearly and transparently taking into account the specifics of the Czech market,
- support the development of the electronic communications market and growth of competition on that market,
- stimulate investment in the entire electronic communications sector,
- aim at the gradual reduction of regulation with a view to its entire elimination.

Upon granting telecommunication authorisations or laying down criteria for their award under the legislation in force, the Government shall always ensure that their award does not distort fair competition. Where the law allows tenders to be invited, the Government shall prefer the form of competitive tendering. The state policy shall be governed by the principle of creating equal conditions on the market and the principle of investment protection, including creation of conditions for such investment to generate adequate returns. The Government regards as particularly important the observance of the above principles in case of granting the third licence for UMTS (universal mobile telecommunication system) and other broadband technologies.

The Government does not intend build and operate on its own an electronic communications infrastructure, on the contrary, it intends to procure electronic communications services from providers of such services. An exception must only be special networks to cover contingency and emergency situations, security and defensive capabilities of the state.

Being a major customer and user of electronic communications services, the government intends to contribute to the development of the electronic communications market by acting in a transparent manner, supporting the development of competition on the market.

Key tasks and objectives relating to the development of the electronic communications market:

- In 2004: complete the transposition of the European electronic communications regulatory framework; to be ensured by means of a new electronic communications act. Continuously: analyse the impact of the EU regulatory framework on the electronic communications market in the Czech Republic.
- Continuously: continue with the liberalisation of electronic communications services and create conditions stimulating:
  - true and effective competition on the market (especially by availability of interconnection between operators), reduction of end-user prices (especially by competition in the supply to end-users), efficient use of the already existing infrastructure elements (especially the so-called local loops).
- Continuously: support further development of the electronic communications market with a view to: creating and permanently maintaining favourable environment for private sector investment, maximising the benefits from a competitive environment for all categories of users.

### 3.1.2. *Affordability of electronic communications services*

The Government deems it right that there should be a competition on the access services market and that the price level of end-user services should be determined by the market through free competition of service providers. In accordance with the new European regulatory framework, the concept of the so-called relevant markets, and the new Electronic Communications Act, currently under development, Regulation shall be applied where there is no sufficient competition in the relevant part of the market so far.

The Government regards as optimal price level of access services the usual level of end-user prices in the EU or lower, in relation to the purchasing power of the population. The Government regards as a very important aspect the nationwide availability of access services and also the specific manner of charging the end-user. That should accommodate the user's needs and an active pattern of using online services and not deform the user's behaviour. Consequently, the Government regards the availability of flat-rate charging models as a prerequisite for the development of the Internet in the Czech Republic.

Such connection shall be generally considered as "high-speed" whose effective capacity does not limit the user in his/her activities. For practical reasons, the limit of "high-speed" connections shall be set at 256 kbps for the moment while a gradual increase is expected.

The Government intends to observe the principle of technological neutrality and shall not exclude or prefer certain high-speed connection technologies over the others.

The Government does not intend to build or operate the infrastructure necessary to provide high-speed connection services. That is what it expects from the private sector. It considers its role in the creation of a favourable environment and investment conditions for the building and operation of such infrastructure and in the stimulation and support of the content services, including priority support to projects co-financed from EU funds.

In line with eEurope 2005, the Government regards the affordability and development of high-speed connection as one of its main priorities and as a key condition for the further development of the information society in the Czech Republic. Therefore, as well as the other EU member states, the Government is going to elaborate it in a separate policy document "State Strategy for High-Speed (Broadband) Access" to be developed by the date of accession of the Czech Republic to the EU.

In the area of television and radio broadcasting, the Czech Republic, similarly to other countries, has been preparing for a gradual transfer to the DVB-T and T-DAB digital systems with the aim of achieving a higher number of available television channels, more economical use of the frequency spectrum, higher quality of received signals, and the possibility of introducing interactive multimedia services. With regard to complex problems of technical, economic, and legislative nature, such action requires long-term preparation that started in the Czech Republic by the development and approval of the policy of transfer to digital broadcasting and by the launch of experimental DVB-T broadcasting



in 2000. The Government assumes that the launch of digital broadcasting will be possible by the end of 2004.

Key tasks and objectives relating to the affordability of electronic communications services:

- By the end of 2004: meet the commitment under eEurope+ and significantly improve the affordability of narrowband Internet access for the broadest population. Better availability means both availability over the entire territory of the Czech Republic and achievement of the average level of end-user prices within the EU or a lower level in relation to the purchasing
- power of the population, including the same proportion between prices for different time periods (peak, off-peak, weekends, etc.) and a choice from different charging models, including flat-rate.
- By the end of 2004: prepare the transfer to digital television broadcasting and keep continuously supporting its development.
- Continuously: support the development and availability of high-speed access with a view to: 1) equipping all public administration entities with high-speed access by the end of 2006, 2) ensuring availability of high-speed access on the entire territory of the Czech Republic as soon as possible.
- At the latest upon accession of the Czech Republic to the EU: draft the „State Strategy for High-Speed (Broadband) Access“.

### 3.1.3. *Electronic communications security*

In the area of electronic communications security, the Government intends to give active support to the deployment and practical use of advanced electronic signature as well as other solutions increasing the security of electronic communications and enhancing protection of privacy and personal data, and observance of copyright and other statutory rights.

The Government does not intend to intervene in the technical principles of security solutions. For those security solutions that are to be supported by legislation, however, it is going to specify binding parameters, qualities and conditions those solutions have to meet and fulfil, with maximum use of the EU standards in force or technological standards recognised worldwide, as appropriate.

Key objectives relating to electronic communications security:

- By the end of 2004: establish a working group for combating computer crime.
- By the end of 2004: develop the National Information Security Strategy.
- Continuously: issue smart cards to managing and expert staff of public administration.
- By the end of 2005: enable reliable and secure interconnection of public administration bodies.
- By the end of 2006: define, issue legislation on and subsequently implement a single abstract national identifier.

## 3.2. **Information literacy**

Information literacy is one of the key factors determining further development of the Czech Republic and prosperity of its entire economy.

Research and studies from many European countries and international organisations (World Bank, OECD, ITU) demonstrate that the development of the European economy depends on a transition from a production-oriented economy to the so-called knowledge-based economy, i.e. an economic system based on efficient use and transfer of knowledge and information. It is clear that such a system will place different and much higher demands on education and skills of citizens, primarily with regard to work with information and use of modern ICT.

Among the key barriers to the computers and the Internet usage in households are particularly insufficient awareness of the potential of their use and also anxiety about the first, elementary steps. It is apparent, however, that broader adoption of those technologies in all areas of life may significantly facilitate the solution of many problems in the economic and social spheres, such as high unemployment or differing speeds of development of various regions. Therefore, the Government regards the development of computer literacy as key to the development of the entire economy and society as a whole.

The Government aims at extending elementary computer literacy in four years to at least a half of the population. The basic instrument for that is, apart from systemic support of information literacy at schools of all levels, also the National Programme for Computer Literacy enabling beginners to acquire basic computer skills. The programme is a public-private partnership. Another Government priority is the expansion of ICT in the education system, which is part of the State Information Policy in Education. Appropriate use of modern technologies in learning will be reflected in the ability of pupils to do their schoolwork in a shorter time and in their better ability to process information.

The Government is intent on endeavouring to create legislative, organisational and technical preconditions for the collection, permanent preservation and making public of published digital documents as an important part of cultural heritage. The Government shall support the use of information technologies to protect and ensure wide access to the cultural heritage in archive, library and museum collections. Libraries and other repositories should provide for equal access to traditional and electronic information resources for education, research, development, and business.

### *3.2.1. Introducing ICT to educational institutions*

The Government regards it as necessary that the speed of internet connection of educational institutions (i.e. schools, scientific and research institutions, and libraries) should increase in preference to other public administration bodies. When equipping educational institutions with ICT and Internet connections, the Government intends to promote to the greatest extent possible the principle of multiple-source funding. The strategy of the Government with regard to the introduction of ICT to schools, including specific projects, is defined in the State Information Policy in Education (SIPVZ), updated and implemented under the authority of the Ministry of Education, Youth and Sports.

The Government deems it right that educational institutions should use their own potential to operate and use ICT. Outsourcing should be applied where the potential of educational institutions is not sufficient.

The Government does not consider as right any exclusivity of commercial entities with regard to the education system, even relating to provision of ICT products and services. The Government is going to support efficiency of procurement of ICT products and ICT services in the education system and libraries by entering into framework contracts with multiple vendors and providers. The target of those framework contracts is to negotiate better conditions and terms for the entire education sector and facilitate mutually alternative offers the schools will themselves choose from.

Enhancement of teachers' information literacy must become a basic skill for graduates of relevant colleges and part of in-service teacher training within the in-service training system.

Key tasks and objectives relating to the introduction of ICT to educational institutions:

- By the end of 2006: finalise connecting all educational institutions (including libraries) to the Internet.
- Continuously: complete the provision of educational institutions with ICT with a view to achieving and maintaining at least the average European level of equipment (in case of schools mainly with regard to the number of pupils per computer, number of teachers per computer, number of computers per school and classroom).
- Continuously: foster the creation of adequate supply of information literacy training and opportunities for e-learning as part of life-long learning.
- Continuously: increase the speed of Internet access of educational institutions with a view to achieving at least the European average of access speed.
- Continuously: systemically enhance information literacy of educational institutions' staff (teachers and librarians).
- Continuously: increase the ability of schools to use ICT, e-learning technology and educational software, including introduction of those in the teaching process.

### *3.2.2. Information literacy, e-learning, digital divide*

Information literacy means the ability to realise and articulate one's information needs, be well informed about information resources, find information using information and communication tech-

nologies, evaluate that information and apply it when dealing with a specific life event or expert task. The Government regards the development of information literacy as an important condition for resolving the current economic and social issues and those of the further development of the whole society and its economy, culture and overall prosperity. At the same time, the Government is aware that information literacy is going to form an increasingly important part of overall education and will more and more frequently decide about quality of life of the entire population as well as opportunities for individuals.

The Government regards the following as the main obstacles on the way towards top information literacy:

- Insufficient incentives and low awareness of the potential of ICT;
- Anxiety about the first, elementary steps, about alleged complexity and intricacy;
  - Low affordability of ICT products (especially computers) and services (especially connection to the Internet) due to their relatively high price in comparison to the purchasing power of the population;
- Limited opportunities to acquire and maintain information literacy.

The absence or lack of information literacy generates such a strong handicap on the part of citizens that it may result in stratification of the population or further extend such stratification, as the case may be. The problem is referred to as the “digital divide”. The Government deems it absolutely essential to actively counter such a danger by removing obstacles and supporting the opportunities of life-long education relating to information literacy for the broadest population.

The Government sees an important opportunity to make information literacy more accessible in e-learning technologies and services and generally in educational software. Therefore, it intends to support their massive deployment and use both within the education system, libraries and public administration, and in the education of the broadest population. The Government is fully aware that due to the fast development of ICT, acquisition of information literacy is not a one-off exercise but an effort of continuous nature. Consequently, it must be part of continuous life-long learning.

The Government regards schools as the basic element of the life-long learning system and they must provide all their graduates with information literacy basics. Apart from that, the Government would like to make use of the educational potential of schools to extend information literacy to the adult part of the population (through courses for the public). Libraries should provide equal access to traditional and electronic information resources for education, research, development, and business.

The Government regards educational activities of the private sector as another important element within the whole system. It intends to support such activities on the basis of public-private partnerships. An example is the National Programme for Computer Literacy (NPCL), organised and co-financed by the Ministry of Informatics. The project is designed for complete beginners and the Government regards it as a basis for life-long learning in relation to computer-literacy. Apart from that basic level, however, there must be also educational programmes of higher levels.

Further, the Government regards it as necessary to have a possibility of objective evaluation of skills and knowledge related to computer literacy. There the Government considers as a basis the ECDL (European Computer Driving Licence) certification system. Once the target is achieved, skills of selected public administration employees should comprise computer literacy, including relevant certification.

The Government is going to motivate the broadest population to acquire and maintain higher information literacy also by economic incentives that would lower the existing barriers and facilitate people’s own efforts to acquire or enhance information literacy. It regards as one of the possible ways preferential taxation of computers for home use and home Internet access.

Key tasks and objectives relating to information literacy, e-learning and the digital divide:

- By 2006: extend the basic computer literacy (on the NPCL level) at least to half of the population.
- By 2006: achieve basic computer literacy certification for selected managing and expert staff of public administration.

- By the end of 2004: introduce preferential taxation on purchase of a home computer and on home Internet access. Continuously: create programmes to develop all elements of information literacy.

### **3.3. Modern online public services**

#### *3.3.1. E-government services*

The Government understands “e-government” as a transformation of internal and external relationships of public administration using ICT in order to optimise internal processes. Its goal is then a faster, more reliable and cheaper provision of public administration services and ensuring greater openness of public administration towards its customers. The same is expected of local self-government.

The key goal of e-government is to enhance the performance of public administration, which should primarily contribute to a simplification of the dealings between the public and the public administration. One way to achieve that goal is to support the operations of administrative authorities when fulfilling tasks of state administration and self-administration by developing rules for the communication environment adequate to the character and contents of jobs done by state authorities. Those rules will support the required information exchange and will be a prerequisite for the cooperation of individual information systems within the public administration. Another goal is to define the procedural and administrative character of activities of administrative authorities, to reflect it in the functionalities of information systems and in the provision for their mutual relationships based on the legal framework governing their operations, and to ensure transfer of data on the basis of the rights and responsibilities defined.

A condition for coordination and simplification of cooperation between individual information systems within public administration and for their interconnection is also the continued implementation of the joint communications infrastructure of public administration as a tool to ensure secure communication between public administration bodies, between individual venues where public authority is exercised, and between public administration and entities outside of it.

To ensure coordinated communication between individual public administration information systems, provide services of comparable quality throughout the country and streamline the communication between citizens and authorities, the role of technical regulations needs to be reviewed. Among the targets should be expedience and quality of the rules approved and focus on open, and above all time-tested international standards (e.g. those of the W3C consortium). The European Commission is heading in the same direction, aiming to ensure interoperability throughout the European Union. It is developing guidelines for that purpose that may be followed by specific EU legislation. The Czech Republic is involved in the drafting of those documents and the decisions to be adopted are going to be transposed into the national framework. At the same time, the Czech Republic is intent on meeting the eEurope 2005 requirements and support the use of open standards.

The Government of the Czech Republic will not influence the use of open-source software (OSS) in the public sector; it will, however, ensure the publication of related information and international recommendations in relation to the local, national and international activities going on in that area. Possibilities of using OSS in public administration shall be continuously reviewed and evaluated.

The principle must apply that data that have once been provided by a natural or legal person to one authority shall not be unnecessarily required again. Public administration bodies will be obliged to refer to data available to them in the first place, and only afterwards require a statement from natural or legal persons on whether a change to the data has occurred and require the current or missing data to be provided. Where changes are identified or missing data added, public administration bodies will have to ensure the updating of the relevant data sources. No unfounded repeated entry and saving of those data must occur. In that way, repeated requests for the same data will be limited as well as existence of inconsistent data sources concerning the same issue within public administration.

In order to observe the above principle, the recorded information available to a public administration body in electronic form in public administration information systems, or public administration

registers, as the case may be, must be correct, up to date, complete, reliably kept and thus trustworthy, i.e. it must correspond to reality (or documents, as appropriate) to the greatest extent possible. Therefore, information will be generated, secured and used jointly by the entire public administration in the newly conceived public administration registers (in particular the basic register of inhabitants, basic register of economic entities, basic register of territorial identification, and basic register of property) that will serve as up-to-date and trustworthy reference information (data) sources for other registers and other public administration information systems, and possibly also for information systems outside of public administration. A lot of information from public administration registers will also be directly available to citizens.

The issue of registers is basically not regulated on the EU level. It is assumed that the key issue with regard to interchange of information is the interoperability of individual information and communications systems of public administrations. That area is coordinated on the European level under the IDA programme. The European Commission has published the so-called European Interoperability Framework—a guideline to ensure interoperability with regard to provision of electronic services by public administration. The programme also includes for example activities relating to meta-data.

Interchange of data between various public administration information systems will always take place through the exchange of data messages between applications, i.e. through unambiguously structured queries for contents of data within the remit of another public administration body. The Government proceeds from the assumption that individual public administration entities run their own information systems to support their own business, and sees its own job primarily in developing rules for the communications environment of public administration entities and their information systems. Those rules include both the statutory definition of competences, powers and tasks performed by government and self-government bodies, as well as the definition of procedural and administrative character of activities of individual entities of public administration, ensuring the required security and protection of information. Further, those rules include technical regulations for an interface for mutual communication between public administration information systems and with the citizen—the user of e-government services.

The Government is intent on bringing online as much public administration businesses as possible and is going to motivate citizens to use the online access as much as possible. On the other hand, the state is not going to abolish traditional forms of providing services to citizens. With regard to the level of utilisation of online versions of services, it will make an effort to provide services in the traditional form more economically.

E-government principles must reflect the second stage of the public administration reform (process reform). The analysis of current processes within public administration must include a review of information systems of individual components of public administration. It appears that permanent improvement of the information systems content followed by the building of user applications are necessary in the first place.

The Government will endeavour to streamline and enhance other administrative activities carried out by public administration bodies.

The Government regards the Public Administration Portal as the main interface between the entire system of e-government services and its users (citizens). The Ministry of Informatics shall coordinate on the national level the development of public administration information systems and building of e-government while individual departments shall be responsible for the development of electronic information services in individual sectors.

Given the increasing openness of the system to other public administration bodies, the second stage of the Public Administration Portal project will focus on the following functionalities:

- Development of a web service to update the Public Authorities Directory;
- Extension of the Public Administration Directory to include a description of the businesses of public administration;
- Public noticeboards;
- Development of a life-events web service.

The Government regards as another priority to create an alternative supply of public Internet access points. At the moment, the largest network of publicly accessible institutions offering Internet access is made up of public libraries. The Government assumes that that network is going to see further dynamic development in the coming years, as a provision in the Libraries Act<sup>1</sup> requires that all libraries providing public library and information services should be able to provide services over the Internet before the end of 2006. During 2004, about 1700 libraries are going to be connected to the Internet and consequently about 76% of the population will live in a place where a library offers public Internet access. With their focus and atmosphere, libraries may conveniently become both possible public administration contact points and information centres.

To simplify the contact of citizens with the public administration, public administration contact points are going to be built further on. Their role is to be a one-stop shop providing citizens with information on public administration and allowing them to do their business related to the so-called life events. Also municipalities and regions may serve as contact points.

A project to support e-government is to use the network of the Czech Post state enterprise as a public administration contact point. Thanks to the investment in ICT made by Czech Post in the past 10 years, all post offices are automated at the moment, most postal services are supported by ICT and first electronic services are ready. Importantly, Czech Post has a lot of experience with providing services to public administration (disbursement of pensions and social benefits) accessible to citizens in their place of residence.

Most public administration services are already available online in the form of providing information or downloadable forms. Therefore in the coming period, the Government is going to place an emphasis primarily on the development of transaction services.

Key tasks relating to e-government:

- In 2005: draft legislation governing the rules for interchange of data between public administration bodies and the status of basic registers of public administration.
- By 2005: interconnect basic information systems of public administration entities in a sufficiently efficient, reliable and secure manner.
- By 2005: provide access from public administration contact points and the Czech Post branches to authorised copies of entries in registers and records of public administration which the citizens need to do their business with authorities.
- By 2005: minimise as much as possible the obligation of citizens to submit to public administration bodies documents in documentary form if the bodies can provide those to each other electronically.
- By 2005: make available via the Public Administration Portal at least the following online services to citizens:
  - portal-type services assisting the public with their life events, possibility to file personal income tax returns,
  - application for personal identification documents (identity cards, travel documents, etc.)
  - single point to announce the change of address online,
  - applications for social benefits,
  - services related to public health care,
  - and the following services for entrepreneurs:
    - processing of employees' social and health insurance,
    - filing of corporate income tax returns,
    - filing of value-added tax returns and excise duty declarations,
    - simplification of online completion and filing of statistical reports,
    - continued introduction of customs declarations relating to electronic customs procedure.

### 3.3.2. *E-procurement*

Use of ICT for public procurement may increase efficiency, improve quality and utilisation of funds spent on public procurement, produce savings and bring about better accountability for public spending.

The absence of clear rules within the EU has been an obstacle so far to the uptake of e-procurement in Europe. The upcoming adoption of a legislative package on public procurement that includes specific rules for e-procurement, should signify a turning point in the uptake of e-procurement in the EU, or its member states, as the case may be. The legislative package will then be transposed into the legislation of the Czech Republic. Under a three-year E-procurement Action Plan, the European Commission will identify all legislative and non-legislative measures that need to be taken to remove barriers to cross-border e-procurement and ensure interoperability of e-procurement systems.

The Government of the Czech Republic regards e-procurement tools as a suitable means of making all public procurement cheaper, more efficient and more transparent. Therefore, it intends to give maximum support to the use of e-marketplaces.

Key task relating to e-procurement:

- By 2006: use e-marketplaces throughout public administration for all procurement worth over CZK100 000.

### 3.3.3. E-health

The Government is aware that the use of the latest ICT is an essential condition for the affordability and quality of health care and will actively promote them. At the same time, deployment of ICT is viewed as a way of increasing the efficiency of the care provided and achieving a higher quality of citizens' lives.

The state is going to link its activities related to patient identification, accessibility of health records, and interconnection and cooperation of health-care providers closely to such activities of the EU in order to achieve maximum compatibility.

To provide public health information and services, for instance related to healthy living, pollution status, options for prevention, availability of care, teleconsultation, etc., the Government intends to use the same means that are used to provide other online e-government services, that is above all the Public Administration Portal.

Key tasks relating to e-health:

- Gradually: replace the existing health insurance cards by smart cards compatible with EU standards, according to EU schedules.
- By the end of 2006: build up an information network connecting points of care in the Czech Republic to such points in the EU and enabling the sharing of public health data and coordination of activities in the events of life and health emergency.
- By the end of 2005: roll out a system providing public health information.

### 3.4. Dynamic e-business environment

The state strategy in relation to e-commerce, including key tasks, has been articulated in a separate document entitled "White Paper on E-commerce" that the Government of the Czech Republic took note of in the Resolution No. 474/2003 of May 19, 2003.

In accordance with the conclusions of the White Paper, the Government regards as its task to create a stable and fair legal and regulatory environment and equal conditions for all entities, and to protect the public interest. All government intervention must be clear, transparent, technologically neutral and must not discriminate against any market players. The Government regards it as necessary that e-commerce development should be driven primarily by the needs of the private sector, based on the requirements and situation on the market. However, it is going to promote the development of e-commerce from its position of a customer, by active behaviour and model use of electronic tools in public administration.

The policy and legislative activities of the Government in this area must be coordinated on the international level in order not to prevent mutual cooperation of all players on the single European market.

#### 4. Funding

The Government regards it as a general role for the private sector to finance the development of information and communication technologies. The role for the Government is seen particularly in stimulating such investment and creating a stable environment for investors. The Government is primarily going to support projects using financing or co-financing from EU funds.

Private sector investment is naturally headed to industries where profits and growth of market and market share, etc. are to be expected. Therefore, the state must create favourable legislative and non-legislative conditions to stimulate private investment in new technologies, especially in regions facing structural problems, regions with high unemployment, inexpedient population structure or transport difficulties.

The situation is specific with regard to the building and operation of infrastructure within public administration. There the Government intends to take individual action and select from procurement and operation on its own, outsourcing, and purchasing of services the option that will be most expedient for it. As regards ICT for contingency and emergency situations, security and defensive capabilities of the state, financing and operation must be ensured using public funds.

The state attaches great importance to specific programmes of cooperation between the public and private sectors—the so-called public-private partnerships (PPP) and it will actively seek and promote them.

To finance public projects (and public components of PPP), the state is going to take maximum advantage of the opportunities arising for the Czech Republic from membership in various EU programmes. There the Government has seen a certain gap so far and it regards as necessary to help also private entities to draw on those funds.

The European Union brings to the member states fairly wide opportunities with regard to co-operation on projects and co-financing those projects. Membership in many EU programmes has already been opened for the Czech Republic and it is taking place on the same basis as in case of other member states. At present, that has been particularly the case of the Sixth Framework Programme for science and research—IST (Information Society Technologies), eTEN, IDA and eContent programmes.

Efficient involvement of the Czech Republic in those programmes is contingent on project proposals elaborated in adequate quality, in correspondence with the objectives of a given programme, providing national project co-financing, and ensuring sufficient implementation capacities.

Another important instrument have been the EU Structural Funds that will apparently play an increasing role in financing high-speed (broadband) Internet access in remote regions, on the basis of its national development strategy. The European Commission has identified the information society as a priority area for Structural Funds co-financing, with a strong emphasis on the demand for services and applications. Co-financing possibilities are used not only to support infrastructure in less favoured regions but also to support the demand side in the information society, based on the increasing ability of companies to use ICT in their activities. In principle, some of the following development policies may be selected with regard to the above:

- Public sector modernisation (critical mass of service users);
- Support of private sector demand (increasing awareness of benefits from use of ICT)
- Support of content development (financing content development, including e-government services);
- Support of computer literacy (development of ICT usage skills)

#### 5. Relations with pan-European activities

The Government approaches its information society activities not in an isolated manner but as part of a wide spectrum of pan-European activities centred around the eEurope 2005 Action Plan.

The Government intends to continue the close coordination of its activities with the European activities and actively participate in them. At the same time, it intends to continue taking an active part in international structures and organisations, inter alia in the Organisation for Economic Cooperation and Development (OECD), International Telecommunications Union (ITU), etc.



### 5.1. Exchange of experience, sharing of information and best practice

The Government intends to ensure active coordination of its information and communications policy by actively participating in the Council of the European Union for Telecommunications and the eEurope 2005 advisory group overseeing mutual coordination of national policies and their implementation.

The Government intends to promote actively the exchange of experience, mutual sharing of information and best practices both on the national level and on the regional and supranational levels. It is going to use a number of standard tools and mechanisms for that purpose, such as organising conferences and workshops, active participation in workshops and conferences and, further, support to supranational sector networks (e.g. European SchoolNet, TeleCities, Eris@, Elanet, etc.)

The Government will actively participate in preparation of the second phase of the World Summit on the Information Society (WSIS). The priority will be mainly to assist by sharing information and expertise related to the bridging of the digital divide in less developed countries of the world.

### 5.2. Measuring and benchmarking

Regular measuring of achievements in the implementation of the State Information and Communications Policy will be based on EU methodology for the eEurope 2005 Action Plan and possibly other documents, as appropriate, which will ensure objectivity of measuring and reduce the requirements for resources for measuring and, last but not least, enable benchmarking of achievements of individual EU member states.

Progress made by candidate countries in the development of the information society under the eEurope+ 2003 Action Plan is already today measured, for the most part using the same criteria as in EU member states and the results are benchmarked against those of the member states.

Measurability of objectives is also helpful with regard to the very difficult task of selecting programmes and projects to be implemented and refusing less efficient projects. It facilitates the concentration of resources on activities that will best achieve the highest effects in measurable criteria. Subsequent measuring during and after implementation will show the real progress made and provide for objective assessment of the actual value for money.

Key tasks relating to measuring and benchmarking:

- By mid-2004: establish a working group for eEurope 2005 data collection.
- Continuously: ensure monitoring of eEurope 2005 reference indicators.

## 6. Summary of key objectives–Action Plan

The new “State Information and Communications Policy” is primarily based on the European Union’s eEurope 2005 Action Plan and has four priority areas ranked by the importance attached to them by the Government of the Czech Republic:

- 1. Affordable and secure communications services
- 2. Information literacy
- 3. Modern online public services
- 4. Dynamic e-business environment

### 1. Affordable and secure communications services

To ensure development of the electronic communications market, the Government intends to:

- by mid 2004: complete the transposition of the European electronic communications regulatory framework; to be ensured by means of a new electronic communications act; continuously: analyse the impact of the EU regulatory framework on the electronic communications market in the Czech Republic;
- continuously: continue with the liberalisation of electronic communications services and create conditions stimulating: true and effective competition on the market (especially by availability of interconnection between operators), reduction of end-user prices (especially by competition

in the supply to end-users), efficient use of the already existing infrastructure elements (especially the so-called local

- loops);
- continuously: support further development of the electronic communications market with a view to:
  - a) creating and permanently maintaining favourable environment for private sector investment,
  - b) maximising the benefits from a competitive environment for all categories of users.

To ensure affordability of access services, the Government intends to:

- as soon as possible: meet the so-far unfulfilled commitment under eEurope+ and significantly improve the affordability of narrowband Internet access for the broadest population. Better availability means both availability over the entire territory of the Czech Republic and achievement of the average level of end-user prices (i.e. including taxes) within the EU or a lower level, including the same proportion between prices for different time periods (peak, off-peak, week-ends, etc.) and a choice from different charging models, including flat-rate;
- by the end of 2004: define the rules of transfer to digital television broadcasting and keep continuously supporting its development;
- continuously: support the development and availability of high-speed access with a view to: equipping all public administration entities with high-speed access by the end of 2006, ensuring availability of high-speed access on the entire territory of the Czech Republic as soon as possible;
- by mid-2004: draft the „State Strategy for High-Speed (Broadband) Access“.

To ensure security of electronic communications, the Government intends to:

- by the end of 2004: establish a working group for combating computer crime;
- by the end of 2004: develop the National Information Security Strategy;
- continuously: issue smart cards to managing and expert staff of public administration;
- by the end of 2005: enable reliable and secure interconnection of public administration bodies (Public Administration Intranet);
- by the end of 2006: define, issue legislation on and subsequently implement a single abstract national identifier.

## 2. Information literacy

To ensure introduction of ICT to educational institutions, the Government intends to:

- by the end of 2006: finalise connecting all educational institutions to the Internet;
- continuously: complete the provision of educational institutions with ICT with a view to achieving and maintaining at least the average European level of equipment (in case of schools mainly with regard to the number of pupils per computer, number of teachers per computer, number of computers per school and classroom);
- continuously: foster creation of adequate supply of information literacy training and opportunities for e-learning as part of life-long learning; continuously: increase the speed of Internet access of educational institutions with a view to achieving at least the European average of access speed; continuously: systemically enhance information literacy of educational institutions' staff (teachers and librarians);
- continuously: increase the ability of schools to use ICT, e-learning technology and educational software, including introduction of those in the teaching process.

To increase information literacy, the Government intends to:

- by 2006: extend the basic computer literacy (on the NPCL level) at least to half of the population; by 2006: achieve basic computer literacy certification for selected managing and expert staff of public administration; by the end of 2004: introduce preferential taxation of home computers and home Internet access;

### 3. Modern online public services

In the area of e-government, the Government intends to:

- by the end of 2005: draft legislation governing the rules for interchange of data between public administration bodies and the status of basic registers of public administration;
- by 2005: interconnect basic information systems of public administration entities in a sufficiently efficient, reliable and secure manner;
- by the end of 2005: provide access from public administration contact points and Czech Post branches to authorised copies of entries in registers and records of public administration that the citizens need to do their business with authorities;
- by 2005: minimise as much as possible the obligation of citizens to submit to public administration bodies documents in documentary form if the bodies can provide those to each other electronically.
- by 2006: make available via the Public Administration Portal at least the following online services to citizens:
  - portal-type services assisting the public with their life events,
  - possibility to file personal income tax returns,
  - application for personal identification documents (identity cards, travel documents, etc.)
  - single point to announce the change of address online,
  - applications for social benefits,
  - services related to public health care,

### 4. Following services for entrepreneurs:

- processing of employees' social and health insurance and making the relevant payments,
- filing of corporate income tax returns,
- filing of value-added tax returns and excise duty declarations,
- simplification of online completion and filing of statistical reports,
- continued introduction of customs declarations relating to electronic customs procedure.

In the area of e-procurement, the Government intends to:

- by 2006: use e-marketplaces throughout public administration for all procurement worth over CZK 100 000.

In the area of e-health, the Government intends to:

- gradually: replace the existing health insurance cards by smart cards compatible with EU standards, according to EU schedules;
- by the end of 2006: build up an information network connecting points of care in the Czech Republic to such points in the EU and enabling the sharing of public health data and coordination of activities in the events of life and health emergency;
- by the end of 2005: roll out a system providing public health information.

### 5. Measuring and benchmarking

- by mid-2004: establish a working group for eEurope 2005 data collection;
- continuously: ensure monitoring of eEurope 2005 reference indicators.

## Appendices

### 1. Czech Republic–background

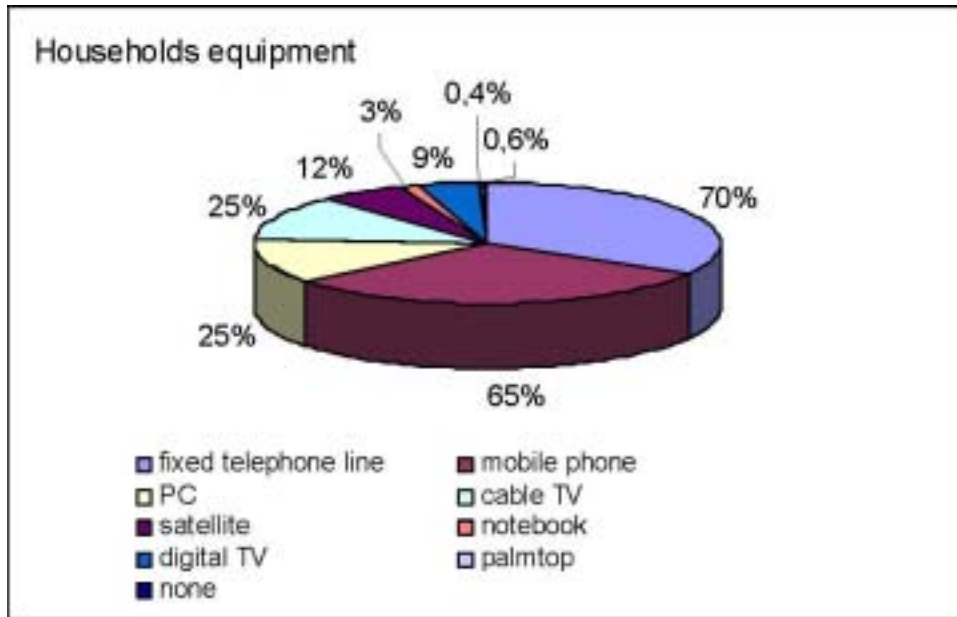
#### 1.1. SWOT analysis

The purpose of the SWOT analysis is to review the initial conditions that will affect the future development of the information society in the Czech Republic. On the one hand, negative aspects are reviewed that should in no way be neglected as they might have an undesirable effect on the development of the Czech society and economy, on the other hand, also those aspects are covered that

facilitate the development of full use of new technologies in our country and those which it is advisable to use efficiently.

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>▪ existence of a central body of public administration to coordinate the development of the information society</li> <li>▪ high penetration of means of mobile communication</li> <li>▪ high general literacy of the population</li> <li>▪ highly developed infrastructure</li> <li>▪ evenly populated territory</li> <li>▪ the Czech Republic is not burdened by legacy systems and technologies as is the case in many developed countries</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>▪ low penetration of ICT in households and high relative costs of purchasing and operation</li> <li>▪ low take-up of high-speed (broadband) access</li> <li>▪ insufficient administrative capacity to use EU funds</li> <li>▪ lack of appreciation for the role and potential of information and communication technologies for the development of the society</li> <li>▪ inconsistencies in the political support to various developments of information policy</li> <li>▪ low computer literacy of the public and insufficient motivation to use modern technology</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>▪ integration into the EU</li> <li>▪ high penetration of information and communications technologies in the business sector and in public administration</li> <li>▪ public administration reform, finance reform</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>▪ actual liberalisation of telecommunications incomplete</li> <li>▪ slow implementation of measures adopted in strategic documents and slow implementation of national legislation</li> <li>▪ inefficient spending of funds on projects, insufficient coordination of projects</li> <li>▪ persistent departmentalism and insufficient vertical cooperation (central institutions, regions, municipalities)</li> <li>▪ inadequate application of new technology in teaching</li> <li>▪ underestimation of the role of research and innovation</li> <li>▪ breaches against security and privacy through the use of ICT</li> </ul>

The experience of the Czech Republic from the previous period of implementation of the State Information Policy and the eEurope+ Action Plan has proven the need to set out a clear vision and its objectives, means to fulfil them and, last but not least, the need for political commitment.



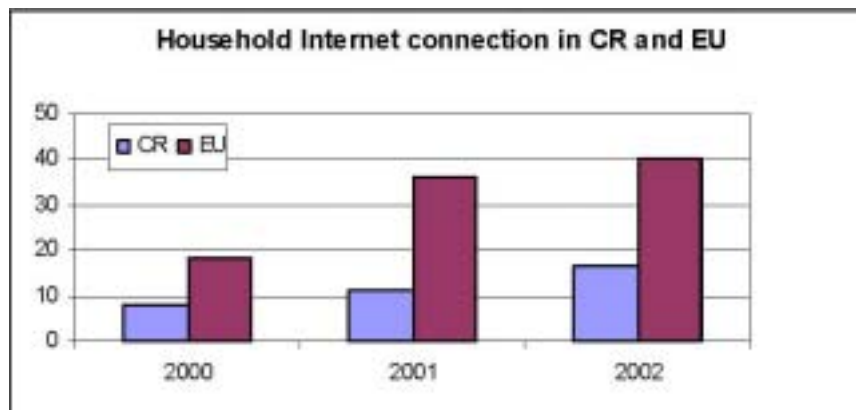
*Information and communication technologies in households*

Surveys by the Czech Statistical Office show that in mid-2002 about 26% of households could potentially access the Internet (based on ownership of the combination a fixed telephone line/mobile phone and a computer/notebook/palmtop) but only 16.4% of households actually used that possibility.

As the main reason for not using the Internet, the households stated (multiple choice):

- don't need the Internet (67%);
- the equipment is too expensive to purchase (36%);
- too high costs of access (21%);
- lack of skills (17%);
- can access the Internet from elsewhere (13%).

Unfavourable for the Czech Republic in comparison with EU countries is particularly the slow growth trend as shown on the following chart:



**1.2. Review of current situation and links to the existing policies**

*1.2.1. Telecommunications (electronic communications)*

In 1994, when a vision of further development of the telecommunications sector was articulated (in the document entitled "Key Principles of the State Telecommunications Policy"), the main emphasis was placed on the development of the fixed telecommunications network. The target was set out to

double the density of main telephone lines by 2000. The measure to achieve that target was to grant exclusivity to SPT Telecom (now ČESKÝ TELECOM, a.s.) in long-distance and international calls and admit a strategic partner. At the same time, a decision was taken to grant two licences for GSM mobile networks (the third GSM licence was granted in 1999).

The following years really saw a major increase of density of main telephone lines. At the same time, however, there was a boom of GSM mobile networks which managed to attract customers, indeed to the detriment of the demand for fixed network voice services. The target to double the density of main telephone lines by 2000 was not achieved in the end not because of insufficient supply but already due to absence of demand. The number of main telephone lines in the public fixed telephone network of ČESKÝ TELECOM, a.s. stopped growing in the course of 2000 just under 4 million (3.854 million at the end of 2000) and has been constantly decreasing ever since. On the contrary, the number of mobile telephones exceeded the number of fixed lines for the first time—by the end to 2000, there were already 4.346 million of mobile phones in the Czech Republic and their number is still increasing. At the moment, the penetration of mobile phones in the Czech Republic is more than double the number of lines in the public fixed telephone network and amounts to almost 90 %, which is above the average of EU member states, while the penetration of main telephone lines in the fixed network only amounts to about 36 lines per 100 people, which is significantly below the EU average.

The total revenues of mobile operators exceed those of fixed operators in 2002. The Czech Republic is then one of the first countries in Europe with direct competition of voice services provided over fixed and mobile networks. The price level for mobile voice services is, due to competitive pressures, one of the lowest in Europe and is already affecting the level of retail prices of fixed network voice services.

Adopted in 1999 as another government policy document on telecommunications, the National Telecommunications Policy was focused primarily on the opening by January 1, 2001, of the market with telephone services provided over fixed networks as the part of the market not yet liberalised and on further gradual liberalisation steps. It failed to bring a policy response to the trend of decreasing demand for fixed network voice services related to the increasing demand for mobile network services and data services and to review the earlier priorities and goals. The goals and objectives set out by the State Information Policy and National Telecommunications Policy have therefore been fulfilled only partially, as technological developments and market requirements took a different turn than anticipated in those documents.

In 2000, a new telecommunications law was adopted (Act No. 151/2000 Coll.), an independent regulatory authority established (Czech Telecommunications Office) and subsequently, as of January 1, 2001, fixed voice services market opened. Alternative operators were allowed to obtain the necessary licences and enter the market. The first interconnection agreements were made. Delayed in 1999, further liberalisation measures were implemented: carrier selection by July 1, 2002 (call-by-call carrier selection—CS) and January 1, 2003 (carrier preselection—CPS), and number portability (NP—by January 1, 2003). The basic stages of the liberalisation process were then completed by local loop unbundling (by August 20, 2003). All in all, voice services are fully available on the territory of the Czech Republic in sufficient quality, both from a geographic and an economic perspective.

Due to insufficient application of fundamental principles of the original EU regulatory framework however, fixed network tariff rebalancing has not been completed. That has an anti-competitive effect at present. Indeed, fixed network access services are in fact subsidised from other services provided by those networks' operators and the competitive environment is distorted.

As for data services, no attention was given in the “Key Principles of the State Telecommunications Policy” to these. Even as late as in 1990, ten-year exclusivity to provide public data services was granted to the Eurotel company (including Internet access services). That exclusivity was terminated early, however, in mid-1995. Data services liberalisation, as a matter of fact, came about completely passing by the interest or influence of government bodies. Development of commercial use of the Internet in the Czech Republic followed as well as significant growth of demand for data services.

In the beginning of 1999, following protests by Internet users against a significant increase in the price of local phone calls, a special Internet tariff (Internet 99) for dial-up connection to the Internet was introduced. That tariff did bring significant advantages for users of dial-up Internet connec-

tion during off-peak periods and at weekends as the price per hour dropped to one of the lowest levels in OECD countries, price in peak hours, however, remained very high. That situation on the fixed dial-up market is gradually improving, though. First offers of flat-rate fees for end-users have emerged. The result should be higher dynamics of the development of dial-up fixed access, although some users are going to switch to the other access options via mobile operators, the wireless WiFi technology or cable TV.

Even the “National Telecommunications Policy” of 1999 was not particularly concerned with the development of the Internet and access to it. Only the “National eEurope+ Action Plan (Czech Republic)” adopted by the Government of the Czech Republic in June 2001 actually dealt with the issue. Its priority was a “cheaper, faster and secure Internet” and the specific goal to be accomplished by the end of 2002 was to “achieve a significant decrease in the price of Internet access by strengthening competition or regulating prices and benchmarking at the European level.” That goal has remained unaccomplished.

Consequently, the Government finds with regard to the status of the liberalisation of telecommunications (electronic communications) that a fully competitive environment in fixed networks has not been accomplished so far. There are several reasons: late introduction of certain pro-competitive measures (in particular carrier selection and local loop unbundling), shortcomings in the legal framework (e.g. impossibility for the regulator to be proactive), little vigour and slowness on the part of the regulator in enforcing its decisions, but also certain protective government decisions in relation to the incumbent fixed-line operator. Also underestimation of general trends plays a role as well as too much emphasis on voice services of fixed networks between 1992 and 1999 and of course the overall economic situation of the country, size of the market, and, last but not least, the still incomplete privatisation of ČESKÝ TELECOM, a.s.

The anticipated effects of liberalisation then became fully evident only in the area of mobile networks and, with regard to fixed-line services, only in the area of long-distance and international calls, particularly because of measures such as carrier selection. Benefits from liberalisation have been bigger so far for corporate customers and significantly lower for the so-called residential customers, that is households and small businesses.

Therefore, the Government regards the overall affordability of Internet access for general public as insufficient to motivate users to work with the Internet actively and to use it more frequently. While 40% of households have Internet access in the EU (the percentage still growing fast), only 17% of households in the Czech Republic have it and the rate of growth since 2000 has been significantly lower than that in the EU—we are increasingly lagging behind.

Overall, the telecommunications market in the Czech Republic is not developed enough for regulation to be completely eliminated. Therefore, the Government regards it as necessary to continue liberalising of the telecommunications market and actively supporting that liberalisation.

### *1.2.2. Information society*

The first comprehensive government policy relating the so-called information society was the “State Information Policy—a Way Towards the Information Society” from 1999. That document set out altogether eight priorities covering the following three areas:

- Introducing ICT to public administration,
- Information literacy (education),
- E-commerce.

Most attention was given to introducing ICT to public administration, less to the issue of Internet access affordability (see previous chapter). The “State Information Policy—a Way Towards the Information Society” was followed by specific elaboration of individual tasks in the “Action Plan to Implement the State Information Policy by 2003”. The implementation of a number of specific actions was unfortunately affected by lack of funds as well as difficult coordination of interdepartmental activities.

The original ideas of building a monolithic “State Information System” were replaced in the “State Information Policy” of 1999 by a more realistic and modern idea of interconnection of individual public administration information systems where those systems would provide a wide range of

services to their operators, the entire public administration and the public at large. The idea was subsequently elaborated in the “Policy on the Building of Public Administration Information Systems” still in 1999 and resulted in the adoption of the Act No. 365/2000 Coll. on public administration information systems and the amendment to certain other acts.

One of the key objectives of the “Policy on the Building of Public Administration Information Systems” was also to build and operate a single national communications infrastructure ensuring the interconnection of individual departments and their information systems. The Government awarded a contract to achieve that objective to ČESKÝ TELECOM, a.s. which subsequently entered with the Government into an exclusive Framework contract to build public administration communications infrastructure. The implementation of the project, however, has been consistently encountering difficulties in the form of insufficient preparedness of the project and unclear financing.

The Electronic Signature Act was adopted in 2000, defining the legal basis for electronic communications, but an increased take-up of electronic signature is still prevented by a number of obstacles. They are mainly the fairly high price for a certificate and few opportunities to use e-signature within public administration, i.e. a small number of applications allowing transaction with the public administration. A change in that regard should be brought about by the Public Administration Portal launched in 2003, specifically its transaction part.

The issue of defining mutual cooperation and communication of individual registers and other data sources of state administration and local government is still unresolved on the systemic level. Computerisation of individual activities of public administration is a current task. The resolution of legal issues concerning the information society where necessary is then one of the long-term priorities of the Government.

The issue of information literacy was separated in 2000 to be covered in a policy document entitled “State Information Policy in Education (SIPVZ)”, coming under the authority of the Ministry of Education, Youth and Sports. Subsequently, Stage I SIPVZ Implementation Plan was developed and its projects PI to PIII were launched. Under the PIII project (Infrastructure, better known as “Internet for Schools”), a nationwide backbone network was set up and individual schools were connected to the new backbone network, the so-called school intranet. Due to higher project costs, the originally allocated funds were not enough to connect all schools but only a part of them. The goal to connect all schools on the declared level and involve ICT in teaching has not been accomplished. In spite of the shortcomings, the project did achieve one of the proposed goals and the Czech Republic is now above EU average with regard to the number of pupils per one personal computer.

Outside of the SIPVZ, the National Programme for Computer Literacy was launched in 2003 for the broadest population without experience with ICT. In cooperation between the state, represented by the Ministry of Informatics, and the private sector, a large network of training centres was built (above all in schools) holding courses for absolute computer beginners. Over thirty thousand citizens went through the NPCL during 2003.

In the area of e-commerce, a separate document was drafted and adopted (“White Paper on E-commerce”). Based on the paper, an amendment to the Electronic Signature Act and a draft act on information society services were prepared, transposing, inter alia, the so-called EC e-commerce directive and governing providers’ liability.

## **2. Relevant documents**

### **2.1. Legislation of the Czech Republic relating to the information society**

- Act No. 227/2000 Coll., on electronic signature and on the amendment to certain other acts (Electronic Signature Act)—and the implementing regulations
- Act No. 365/2000 Coll., on public administration information systems and on the amendment to certain other acts
- Act No. 151/2000 Coll., on telecommunications and on the amendment to certain other acts—and the implementing regulations



- Act No. 29/2000 Coll., on postal services and on the amendment to certain other acts (Postal Services Act)—and the implementing regulations
- Act No. 106/1999 Coll., on free access to information

## 2.2. EU legislation relating to the information society

### *Regulations:*

- Regulation (EC) No 733/2002 of the European Parliament and of the Council of 22 April 2002 on the implementation of the .eu Top Level Domain (Text with EEA relevance)
- Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data
- Regulation (EC) No 2887/2000 of the European Parliament and of the Council of 18 December 2000 on unbundled access to the local loop (Text with EEA relevance)

### *Directives:*

- Directive 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the processing of personal data and the protection of privacy in the electronic communications sector (Directive on privacy and electronic communications)
- Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive)
- Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive)
- Directive 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive)
- Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce)
- Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community framework for electronic signature
- Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity
- Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations
- Directive 98/10/EC of the European Parliament and of the Council of 26 February 1998 on the application of open network provision (ONP) to voice telephony and on universal service for telecommunications in a competitive environment
- Directive 97/33/EC of the European Parliament and of the Council of 30 June 1997 on interconnection in Telecommunications with regard to ensuring universal service and interoperability through application of the principles of Open Network Provision (ONP)
- Directive 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts
- Directive 97/13/EC of the European Parliament and of the Council of 10 April 1997 on a common framework for general authorizations and individual licences in the field of telecommunications services

- Commission Directive 96/2/EC of 16 January 1996 amending Directive 90/388/EEC with regard to mobile and personal communications
- Directive 95/62/EC of the European Parliament and of the Council of 13 December 1995 on the application of open network provision (ONP) to voice telephony
- Commission Directive 94/46/EC of 13 October 1994 amending Directive 88/301/EEC and Directive 90/388/EEC in particular with regard to satellite communications
- Council Directive 92/44/EEC of 5 June 1992 on the application of open network provision to leased lines
- Council Directive 91/263/EEC of 29 April 1991 on the approximation of the laws of the Member States concerning telecommunications terminal equipment, including the mutual recognition of their conformity Council Directive 91/287/EEC of 3 June 1991 on the frequency band to be designated for the coordinated introduction of digital European cordless telecommunications (DECT) into the Community
- Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs
- Commission Directive 90/388/EEC of 28 June 1990 on competition in the markets for telecommunications services
- Council Directive 90/387/EEC of 28 June 1990 on the establishment of the internal market for telecommunications services through the implementation of open network provision
- Commission Directive 88/301/EEC of 16 May 1988 on competition in the markets in telecommunications terminal equipment
- Council Directive 87/372/EEC of 25 June 1987 on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community
- Council Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs
- Council Directive 93/98/EEC of 29 October 1993 harmonizing the term of protection of copyright and certain related rights
- Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society

### **2.3. Related information society documents**

#### *Czech Republic*

State Information Policy National Telecommunications Policy Action Plan to Implement the State Information Policy by 2003 National eEurope+ Action Plan (Czech Republic) Policy on the Building of Public Administration Information Systems State Information Policy in Education White Paper on E-commerce Green Paper on E-commerce Draft Basic Measures to Support E-commerce in the Czech Republic

#### *European Union*

- eEurope 2005 Action Plan
- eEurope 2002 Action Plan
- eEurope+ Action Plan
- eEurope+ Progress Report (June 2002)
- Ministerial Conclusions (European Ministerial Conference: Information Society, June 2002)

### **2.4. European Union programmes relating to the information society**

- IDA (Interchange of Data between Administrations)  
<http://europa.eu.int/ISPO/ida/jsps/index.jsp>
- eContent  
<http://www.cordis.lu/econtent/>
- IST (Information Society Technologies)  
<http://www.cordis.lu/ist/home.html>

- Safer Internet Action Plan  
[http://europa.eu.int/information\\_society/programmes/iap/index\\_en.htm](http://europa.eu.int/information_society/programmes/iap/index_en.htm)
- eTen  
[http://europa.eu.int/information\\_society/programmes/eten/index\\_en.htm](http://europa.eu.int/information_society/programmes/eten/index_en.htm)
- GoDigital  
[http://europa.eu.int/information\\_society/topics/ebusiness/godigital/index\\_en.htm](http://europa.eu.int/information_society/topics/ebusiness/godigital/index_en.htm)

**2.5. Basic public eServices**

List of basic public e-services defined by the European Commission e-government expert group:

<b>Services for citizens</b>	<b>Services for Businesses</b>
1. Declaration and payment of income tax	13. Processing of employees' social and health insurance and making the relevant payments
2. Job search	14. Declaration and payment of income tax
3. Social benefits processing	15. Declaration and payment of VAT
4. Application for personal identification documents	16. Registration of businesses
5. Car registration	17. Completion of statistical reports
6. Application for a building permit	18. Customs declaration
7. Declaration to the police	19. Public procurement
8. Available catalogues of public libraries	20. Applications and permits relating to the environment
9. Request for and delivery of birth certificate, marriage certificate	
10. Enrolment in secondary schools and universities	
11. Announcement of a change of address	
12. Services related to public health care	

The above list is used for e-government evaluation and benchmarking in individual EU countries.

## Triada Ltd.

### Contacts

Triada, spol. s r. o.  
U svobodárny 12/1110  
190 00 Praha 9  
Czech Republic

Tomáš Renčín  
phone: 00420-284001284  
fax: 00420-284818027  
e-mail: [rencin@triada.cz](mailto:rencin@triada.cz)

### The Company

Triada Ltd. holds conferences for local and state government and administration, develops and promotes software for state and local government and company issues municipal magazine called “Obec & finance” (Municipality & Finance). Triada Ltd. engage 25 employees and 38 external collaborators.

### Major Activities

#### Conferences for state and local government

International conference called “The Internet in Public Administration/Local and regional Information Society/Visegrád Group for Developing Information Society”.

Annual national—since 1998—and international conference, last year it was visited by over 2000 participants from the 20 European countries.

Main topics: Legislative Process and the Internet, EU Programmes—support of information technologies, Launched projects of digital cities and e-areas in Europe, Discussion: E-government—state administration in the Internet era, e-Europe initiative of the European Union but also the e-Europe+ initiative—a EU-candidate support of the “European 15” intentions, The Internet and Education, Round table with the most important personalities

Activities of the European Forum for information society, Activity of Telecities, Global Cities Dialogue, Elanet and ERIS@ association, The development of information society and employment, eCommerce.

For more information: [www.issc.cz/loris](http://www.issc.cz/loris), comparison of experience of the representatives of the countries—new members and candidates, with the opinions of their colleagues from the European Union countries.

Conference called The Day of Small Villages is visited by mayors of small villages and they discuss their own specific problems.

### Magazines

#### *Municipality & Finance (Obec & finance)*

Since 1996, 5× a year, for every municipality in the Czech Republic, number of copies: 8000, average number of pages 125.

Magazine for economical issues of towns and villages, regional politics, local development, appropriation programmes for local government. Independent part of magazine is “Public Administration On-Line”, 16–24 pages devoted to use of recent technologies including the Internet in public administration.

For more information: [www.triada.cz/oaf](http://www.triada.cz/oaf)

#### *Daily News for Public Administration*

It is the Internet magazine for public administration, it provides daily news, links to other public administration servers, in part called “Towns and Villages” there is statistics of all towns and villages in the Czech Republic (over 6000 municipalities), it provides outline of the main events (for example conferences, fairs, meetings, deadlines etc.)

For more information: [www.obce.cz](http://www.obce.cz)

**Software for Public Administration**

Since 1991, the company Triada provides and develops software and all relevant services. This software solves municipality finance, property evidence, local tax, wages, office system, evidence of inhabitants and lands, elections and over 20 other agendas. This information system is used by over 1500 municipalities in the Czech Republic.

For more information: [www.triada.cz](http://www.triada.cz)

