



Newsletter #1

October 2006

Newsletter of the ELOST Project

Published twice a year, Editorial: Tal Sofer, ICTAF, Tel-Aviv University (tsofer@eng.tau.ac.il)

Information and communication technologies provide governments with new and powerful tools, which enable better and faster communication with citizens. The readiness of citizens to participate in e-Government is crucial for the latter's diffusion and consolidation. The use of e-Government services depends on various factors such as ease of use, proficiency, accessibility and civic engagement. Persons displaying lower than average use of e-government include the elderly, disabled people, immigrants or members of ethnic minorities and, more generally, low socio-economic status groups (LSG). The pace at which countries deploy e-Government services, including measures taken to increase their use by LSGs, vary considerably across Europe.

The ELOST project was set up with the support of the European Commission's Sixth Framework Programme to make recommendations on e-inclusion and e-Government. The ELOST consortium comprises research centres from six different countries, including, Israel, Austria, France, Germany, Bulgaria and Finland. In order to arrive at policy proposals, the project is carrying out the following activities:

- A cross-national comparative assessment of e-Government services. Consortium partners report short country profiles in this issue: Niki Rodousakis (Austria), Lina van Aerschot (Finland), Nico de Abreu (Germany), Avram Eskenazi (Bulgaria), David Alcaud (France) and myself (Israel).
- A survey of citizens of lower socio-economic background about their patterns of internet and e-Government use, their attitudes toward new communication technologies and the barriers they face in this new societal era. The survey is being launched later this Fall, and the fieldwork will be completed at the end of this year. Liana Giorgi reviews what is already known about the use of e-Government from earlier surveys.
- A foresight study into emerging ICT technologies and their implications for the future of e-Government. An expert workshop and a first brainstorming on this subject was organized with the support of the Paris City Council in July 2006. Based on the outcomes of this workshop, an internet-based expert survey targeting over 400 experts across Europe was launched in September. Aharon Hauptman reports on the first results.

We are proud of the project's achievements in this short

period of time and pleased to be able to report our initial findings through this first edition of the ELOST newsletter. This newsletter will appear twice a year and inform interested readers and stakeholders about the project's results and upcoming events. Keeping close contact with policy-makers at national / local level, as well as with other researchers and professionals working in this field is an important component of our work. We therefore look forward to your comments to this newsletter and, indeed, your contributions to the next issue. Visit us on the internet at www.elost.org.

Patterns of ICT Use and E-Government – What we Already Know

Liana Giorgi, ICCR (l.giorgi@iccr-international.org)

According to data from Eurostat, in 2004 every second European had used the internet within the last 12 months. Moreover, those who use the internet use it frequently: 54 per cent nearly every day, 82 per cent at least once a week. Across Europe, the internet is used primarily for sending / receiving e-mails (over 80 per cent), finding information (80 per cent), for making travel arrangements (44 per cent) and for internet banking (37 per cent).

The share of internet users using the internet for obtaining information from public authorities is rising and currently stands at 40 per cent. This can be described as a passive use of e-government. Active forms of e-government are more uncommon: only 20 per cent of internet users use the internet to download official forms, and a mere 10 per cent for submitting filled-in forms.

The use of the internet shows a strong socio-economic bias. Education, professional qualifications, age and income play a role. Unfortunately, relevant data both at European and national level is scarce, despite the much deplored 'digital divide'. What we do know is that students are most likely to use the internet on a regular basis. The next group to frequently use the internet is employees. Unemployed persons and retired persons are least likely to use the internet. Table 1 compares related data for several European countries. It illustrates that Sweden is the country with the narrowest digital divide, Italy the country with the largest. In Greece and other Mediterranean countries, the problem of the digital divide is compounded by that of overall low accessibility to relevant infrastructure.

Somewhat more detailed information on the socio-economic differentials regarding ICT usage is provided by the 2002 SIBIS General Population Survey. This developed the COQS compound indicator on digital literacy.

This measures

- confidence in own ability in using internet for communicating (C) with others via internet, chat, or personal Web Site;
- ability to obtain (O) or download and install software on personal computer;
- ability to question (Q) sources of information;
- ability to search (S) sources of information.

Share (in %) of... using internet	Students	Employed	Unemployed	Retired
Sweden	94	79	80	33
Finland	93	74	49	14
Austria	90	57	38	12
Germany	84	60	52	18
UK	84	58	N/A	17
Estonia	89	52	27	3
Italy	62	35	24	4
Greece	46	25	12	1

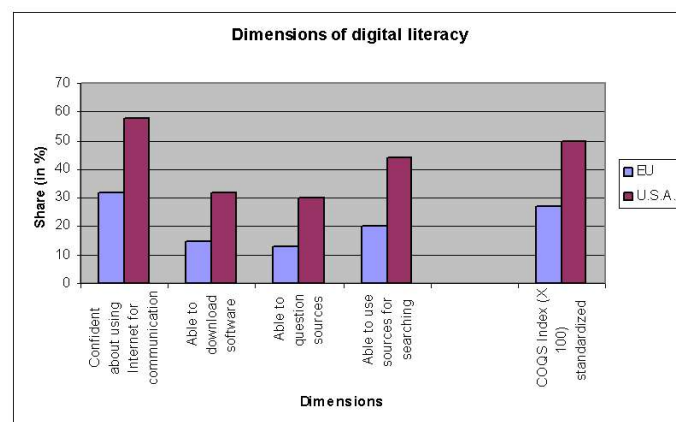
The SIBIS survey found that in 2002:

- 32 per cent of Europeans (in EU-15) were confident about using the internet for communication as compared to 58 per cent in the USA;
- 15 per cent for downloading software as compared to 32 per cent in the USA;
- 13 per cent for questioning sources (30 per cent in USA), and
- 20 per cent for searching sources (44 per cent in USA).

There are mainly small, albeit still significant, gender differences, and quite extreme age differences. Across Europe and in the USA, the youth (18-24) is more confident about its internet abilities. There are also significant educational, social class and income differentials. However, the SIBIS survey found that these cross-national differences levelled off once the national differences regarding skill levels are controlled for. This underlines the importance of education for overcoming the digital divide.

In terms of the compound index, the EU-15 scores 27 on a standardized scale from 0 to 100, as compared to 50 for the USA. Among the youth the gap is much smaller: 50 in EU-15 as compared to 73 in the USA. The highest level of digital literacy was observed in Denmark (47), the lowest in Portugal (13).

The BISER regional survey (2003) inquired into the significance of barriers such as access, affordability, perceived usefulness and internet 'inertia'. Affordability (or lack thereof) was identified as the most relevant barrier. The availability and use of public internet access points (PIAP) was found to vary significantly across regions: these were used extensively in some regions, very little in others; location was here of significance.



More detailed information regarding the use of the internet according to socio-economic criteria and the reasons for non-use are not available. This underlines the importance of the ELOST survey. The ELOST survey will be organized in six different countries. Unlike the surveys indexed in this article, the ELOST survey will target fewer respondents (250 minimum target in each country), however mainly low socio-economic status groups. Furthermore, it includes a range of more detailed questions about the reasons for low ICT and e-Government use. Therefore, it promises to provide the information that is currently missing for improving e-Government services towards greater social inclusion.

The preliminary results of this survey will be published in the next ELOST newsletter in February 2007. Look out for the first analyses.

References

Most important current sources on ICT usage and e-Government

- SIBIS General Population Survey carried out in 2002 in EU-15 and USA; achieved sample: 11,832 individuals (around 500 per country in EU and 1,000 in USA).
- BISER Regional Population Survey carried out in 2003 across 28 regions in EU-15; achieved sample 11,300 (around 400 per region).
- EUROSTAT Survey on ICT Usage in Households and by Individuals carried out in 2004 across over 76,000 households (around 130,000 individuals) in EU-25.

The Future of E-Government: Technological Capabilities and Societal Challenges

Aharon Hauptman, ICTAF, Tel-Aviv University
(haupt@post.tau.ac.il)

Given the pace of contemporary technology advances, the equivalent of looking ahead today at the year 2020, is like going back in time not 14 years, but perhaps 26, to the year 1980, and looking ahead at the year 2006. In 1980, there were no personal computers, no World Wide Web, and no mobile phones. Most communication was still via postal

'snail-mail'. Could the commercial Web or the cellular phone be envisioned in 1980? Insofar as the underlying ICT technologies already existed, the answer is probably yes. But the same does not apply to social phenomena such as chatrooms, online forums, music file-sharing, e-shopping and e-Government. Predicting such developments would have been more difficult.

The ELOST foresight study evaluates the impact of emerging technologies on e-Government services and on their use by low socio-economic status groups (LSGs). The first stage of the study included a review of previously selected technological and future-oriented publications. Additional insights were gained through an expert workshop (held in Paris in July 2006) and from interviews with experts. This provided an important background and basis for a larger-scale web-based expert survey. This is currently ongoing.

Once existing problems with regard to access, bandwidth, usability of interfaces and security are solved, access to telecommunications networks, including the internet, is expected to become seamless, ubiquitous and transparent. E-Government shall be available to everyone, at anytime and anywhere, its use simple and intuitive via multiple channels and multiple interfaces. According to the OECD 'e-Government Imperative', an important guiding principle should be that there is 'no wrong door': citizens should have a choice in the method of interaction with government. Nevertheless, the level of automation will be much higher. As one of the ELOST interviewees stated: 'by 2020, we will not be speaking of "e-Government" anymore but rather just of "government", because it will be obvious that we are referring to e-Government.' The IPTS claims that within 10-20 years, when today's youth are adults, 'concepts of e-Government, e-Security and e-Inclusion will change dramatically if not disappear altogether, and the technology will probably also have changed beyond recognition.'

Interoperability between systems/services/applications is an important pre-condition for the integration of services between different governmental levels. Offices will function as multiple channels, allowing for all modes of interaction: face-to-face, phone calls, written letter by fax/post, or using the internet. However, the electronic track will dominate and other forms of communication are likely to gradually disappear. In the future, the internet will be available on different interconnected devices including interactive TV, virtual reality, mobile phones, foldable displays and public kiosks. This is the vision of Ambient Intelligence (Aml). A shift away from traditional PCs to a variety of interconnected devices, which are unobtrusively embedded in our environment and accessed via intelligent interfaces, is expected. For Aml to work, more emphasis needs to be placed on user-friendliness empowerment, efficient services support, and support for human interactions.

There are both social and cultural reasons for not using

modern information and communication technologies. The non-use of new technologies by individuals implies mistakes in design and appropriation. In the future, technologies should and will be much easier to use. Technologies must ensure that interaction between citizens and governmental services run smoothly and is intuitive. Accessibility of LSGs to e-Gov services should and will become easier, quicker, more attractive and less threatening.

Some experts believe that new technologies will only indirectly impact on the use of e-Government by LSGs, the most important factors and facilitators being of social and political nature instead. In order to prevent the danger of 'digital illiteracy' educational and training initiatives are of particular importance. Both the state and civil society have a role to play in this respect.

Another important set of obstacles hindering the wider diffusion of e-Government relates to trust and security, especially with regard to self-identification and e-signature. Technological solutions to these problems already exist, but they are not simple enough and not applied in practice. Appropriate infrastructure for secure online payments is considered by some experts as an essential basis for promoting all other e-Government services.

Some experts believe that new technologies will only in summary, the following technology areas are likely to have significant impact on the future of e-Government services and their use:

- Ambient Intelligence
- Multi-modal and multi-channel access and information management
- Advanced speech recognition (natural language, speaker-independent).
- Virtual/Augmented Reality
- Automatic translation (near real-time)
- High-Speed Broadband Communications (e.g. FTTH-Fiber to the home)
- Interactive TV (incl. Video)
- Wearable Computing
- Future Web Technologies (Web 2.0 or beyond, Semantic Web)
- Advanced authentication/security technologies
- Advanced Mobile/Wireless networks (3G/4G or beyond, WiMax)
- Advanced mobile displays (including future foldable displays such as e-paper)
- Intuitive/adaptive interfaces
- Advanced usage of Smart Cards
- RFID Tags
- Mobile high-speed networks

The impact of these technologies on the use of e-Government and on e-inclusion is being assessed in the course of an online Delphi survey. The first wave of this survey is currently ongoing. We will report on the preliminary results in the next issue of this newsletter.

Country profiles

E-Government in Austria – As Good as it Gets?

Niki Rodousakis, ICCR (n.rodousakis@iccr-international.org)

In the European Commission's 2006 sixth benchmark study on online availability of public services, Austria ranked first both in the category 'online sophistication of public services' (95 per cent) and in terms of 'Full availability online' (83 per cent). Both scores are well above the EU average, which lie at 75 and 48 per cent respectively. That is, e-government services in Austria are widely available, though – as is the case for the rest of the EU – public services for businesses are more developed than those available to citizens. The use of Austria's e-government services by citizens lies above the EU average as well (29 compared to 22 per cent, according to EUROSTAT data). Unfortunately, no data is available on the use of e-government services by low socio-economic status groups.

According to the Federal ICT Strategy Unit, e-government addresses 'all citizens, independent of their income or personal life situation'. Consequently, accessibility is one of the eleven principles Austria's e-government strategy is based on. Accessibility is defined as ensuring that all electronic services provided by public authorities are available to all without discrimination. [This, in turn,] entails the removal of technical and social barriers and the implementation of the Web Accessibility Guidelines (WAI) and increasing the availability of public terminals. The government is aware that 'the widest possible number of citizens can only be reached if access is provided for everyone and this consequently includes access through an intermediary for all those unwilling or unable to use a computer'.

Several initiatives have been taken to ensure that e-government becomes more user-friendly, an important first step to make e-government appealing. These include a style guide for online forms (a standard layout for all e-government forms to facilitate navigation for users and sets minimum requirements, such as conformity with Level A of the WAI guidelines), as well as providing a 'one-stop-shop' (www.help.gv.at) for citizens and businesses which unifies all services provided by the public administration. All internet sites linked to the public administration must be compatible with the WAI guidelines (Level A) by January 1, 2008, to ensure that these sites become accessible to the widest range of persons possible.

Thus far, more than 600 multimedia broadband-internet telephone booths (Multimedia Stations) have been set up

in public areas across Austria. By the end of 2006, 1000 such stations will be available. According to Telekom Austria, there are currently 370,000 users per month. In Vienna, a total of 191 public internet access points are available. Besides the Multimedia Stations, the City of Vienna has set up 'Vienna Access Points' for supplying information on the administration of the City of Vienna, authorities, job opportunities and housing. Furthermore, so-called 'Vienna City Terminals', specifically built for outdoor set up, offer local information and advertisements on different district streets. In most libraries, internet access is free of charge.

Groups identified as target groups with regard to e-inclusion by the Austrian government include handicapped persons, seniors, unemployed persons and women. Measures specifically targeting low socio-economic groups in the 2005 ICT Master Plan include:

- Improving ICT knowledge of older employees to reduce the digital divide in terms of age by offering courses and training tailored to older employees' specific requirements;
- Increasing e-literacy by prioritizing IT introductory courses for all persons, i.e. making such courses affordable by subsidizing them to some extent, and offering classes in less populated areas as well;
- Establishing a central office for security issues (thus making citizens who are concerned about data protection feel more at ease about using the internet and e-government);
- Diffusing e-government to local communities to increase use;
- Assisting low socio-economic status groups in acquiring computers to decrease the digital divide in terms of income;
- Labelling computers for certain target groups to assist them in making the right choice when purchasing/using a computer (i.e. labelling computers as being very 'senior-friendly', for example, etc.); and
- Reimbursing broadband acquisition costs for low socio-economic status groups and thus contributing to the reduction of the digital divide in terms of income.

There is no doubt that the digital divide will have decreased significantly by the next generation due to the high exposure to ICTs and the priority given to ICTs in the school curriculum, yet 'waiting it out' is not an option. Austria is overall doing very well with regard to the diffusion and user-friendliness of available e-government services. Citizens who already use the internet have benefited from Austria's e-initiatives. If the objectives of the ICT Masterplan with regard to increasing the use of ICTs are in fact implemented, a considerable step toward tackling the digital divide in the 'here and now' could be made.

Groups identified as target groups with regard to e-inclusion by the Austrian government include handicapped persons, seniors, unemployed persons and women. Measures specifically targeting low socio-economic groups in the 2005 ICT Master Plan include:

- Improving ICT knowledge of older employees to reduce the digital divide in terms of age by offering courses and training tailored to older employees' specific requirements;
- Increasing e-literacy by prioritizing IT introductory courses for all persons, i.e. making such courses affordable by subsidizing them to some extent, and offering classes in less populated areas as well;
- Establishing a central office for security issues (thus making citizens who are concerned about data protection feel more at ease about using the internet and e-government);
- Diffusing e-government to local communities to increase use;
- Assisting low socio-economic status groups in acquiring computers to decrease the digital divide in terms of income;
- Labelling computers for certain target groups to assist them in making the right choice when purchasing/using a computer (i.e. labelling computers as being very 'senior-friendly', for example, etc.); and
- Reimbursing broadband acquisition costs for low socio-economic status groups and thus contributing to the reduction of the digital divide in terms of income.

There is no doubt that the digital divide will have decreased significantly by the next generation due to the high exposure to ICTs and the priority given to ICTs in the school curriculum, yet 'waiting it out' is not an option. Austria is overall doing very well with regard to the diffusion and user-friendliness of available e-government services. Citizens who already use the internet have benefited from Austria's e-initiatives. If the objectives of the ICT Masterplan with regard to increasing the use of ICTs are in fact implemented, a considerable step toward tackling the digital divide in the 'here and now' could be made.

E-Government in Finland – Leading but with a Handicap

Lina van Aerschot, University of Tampere

(Lina.van.Aerschot@uta.fi)

The infrastructure for information and communication technologies (ICTs) has evolved rapidly in Finland. About 54 percent of the households have a computer and access to the internet. According to the Finnish Information Society Council's 2006 report on the future of the information society in Finland, new applications and ICT usage patterns increase the dynamic and productivity of Finnish society. The aim is to ensure that citizens are able to 'operate in the global

economy and use the e-Government services offered by the public administration' by 2010. However, according to the report, there are a number of obstacles such as the lack of information on the possibilities of e-Government and the lack of skills for using public services online: according to a survey conducted by Statistics Finland in 2004, 70 per cent of Finns preferred to 'take care of business' by telephone rather than by mail or computer. Reasons for not using e-Government services include inexperience, distrustfulness and the desire for personal contact.

Finland is one of the leading countries with regard to the usage of ICTs. Almost every public organization and institution, i.e. most ministries, municipalities, universities, schools, health care and social services, libraries and transportation facilities, have an own web site. Interactive services are, however, still deficient. According to recent research results, the most frequently used portals are – in descending order – those of municipalities, of the Ministry of Labour, the social insurance, the tax office and local libraries. Insofar as the Ministry of Interior is concerned, services will only be fully-online by 2010. In the private sector, internet usage is very common: according to the Nordic Council of Ministers, in 2005 nearly 100 percent of private enterprises had internet access and a little under 80 percent had a website.

E-Government services for groups or minorities with special needs are not explicitly considered when official action plans are developed or policy programmes are implemented. For example, low socio-economic status groups are not considered as groups with special needs when it comes to e-Government services or computer skills, despite the fact that research shows that socio-economic status is by far the most discriminatory factor with regard to the use of internet and e-Government services.

E-Government in Germany – The Quest for the Breakthrough

Nico de Abreu, NEXUS (deabreu@nexus.tu-berlin.de)

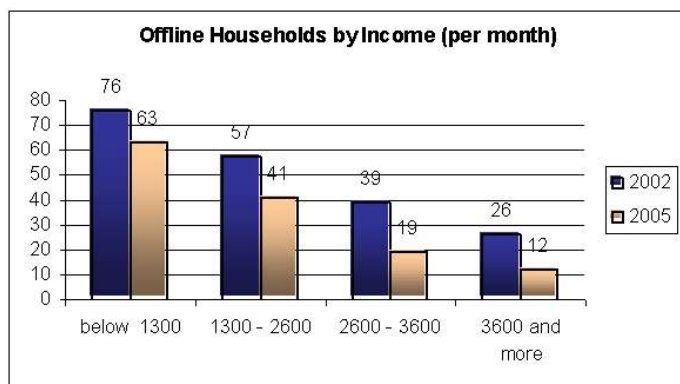
Germany's Federal Government uses e-Government as an instrument for better and faster communication with citizens, as well as for improving the general organization of federal and local administration. In August 2005, the Ministry of the Interior announced the completion of the project 'BundOnline 2005' which was launched in the year 2000 to make all public services available on the Web. Several projects involving administrations going on-line were implemented with the support of the industry in the framework of public-private partnerships.

In 2003, 73 per cent considered e-Government to be interesting; and almost half of all internet users used it regularly (16.3 per cent) or at least occasionally (32.6 per cent). However, as many as 45 per cent of Germany's internet users (or 60 per cent of the German population)

were not interested in using e-Government at all.

After the elections in 2005, the new government consisting of a coalition between the two biggest parties (Christian Democrats and Social Democrats) commissioned the responsible department to examine all online services with regard to usability and utility for potentially excluded population groups. Besides making all public administration services available online, the Federal Government has launched campaigns to increase broadband take-up, as this is considered a key condition for increasing e-Government usage rates.

Internet use in Germany has been rising steadily and significantly throughout recent years. Yet the fact that 45 per cent of the German population are still offline remains the main exclusion factor.



While users with disabilities are rather well catered for and both age and gender issues will not be important exclusion factors in coming years as take-up in both groups has progressed quite well, social status remains a major exclusion factor. Even though internet usage rates increased among the low income population, the tendency remains the same: the lower the income, the more likely it is for a household to be offline.

One primary target group of government action has been the unemployed. Much time and money has been invested into setting up the Web portal of the labour office where citizens can download forms for unemployment benefit requests and use extensive job search facilities. Despite these efforts, the majority of unemployed do not have own private access to the internet, only 39 per cent are 'online'.

Internet usage rates are directly connected with education levels: the higher the education level, the higher the number of internet users. While only 16.8 per cent of graduated academics were offline in 2005, the number of 'Off-liners' in the group with basic education was as high as 69 per cent.

These figures have been improving in the last years. Among the youth, educational differences play a much less significant role: the number of pupils online increased from just below 74 per cent to somewhat over 87 per cent between 2002

and 2005. A comparable trend can be observed among immigrant communities of all age groups.

E-Government in France – A Model for Reorganizing Public Administration?

David Alcaud, CIR (d.alcaud@iccr-international.org)

The development of e-Government in France can be said to represent an attempt to remedy the traditional wrongs of public administration. A massive effort to build up e-Government is currently under way: a 4-year e-Government strategic plan (PSAE) covers the period from 2004 to 2007: 140 new or improved services are to be made available by 2007. The major objectives include: user-friendly services, simplified procedures and greater responsiveness of the administration. The relationship with the user is to be more personalized, the services to be accessible to everyone, including non internet-users. The data resources and processing tools required will be made available to the civil servants in the field, so that they can respond to requests by post, telephone, e-mail or personal visit. The objective is for e-government tools to facilitate the work of town hall staff and make it more efficient, enabling people who do not have the necessary knowledge or hardware to access the same services as internet users. At the same time, the ADAE, in partnership with the Delegation to the Usages of internet (DUI) and the DIGITIP (the department of industry, information technology and postal services), will provide support for regional authorities and health and welfare organizations deploying free access at public terminals. Still, the existing services remain average in comparison with those of the country's European and international neighbours.

The PAGSI governmental action plan (1997-1998) did not explicitly adopt an 'access for all' policy. The 'digital divide' has only incrementally been considered in French policy. Two aspects should be underlined. First, the focus is more on access issues than on use: many French studies on the digital divide are primarily concerned with 'geographic disparities' and especially insist on the fact that there are strong regional differences with regard to access to communication infrastructure. Second, there are no policy measures or strategies for improving access. The current strategy relies on alternative means for disadvantaged people, for whom public service access is already difficult (people suffering from handicap, people living in isolated areas, elderly people etc.)

The digital divide in France displays the same characteristics as in other European countries. Relevant factors include: gender, workers/unemployed, geography, ageing, and other well-known cleavages (illiterate, handicap, disadvantaged areas, ethnic minorities, immigrants, prisoners). French surveys confirm that most of the socio-economic factors related to social exclusion also apply to the use of internet:

socio-economic gaps remain the most significant for internet access and use, and show the fewest signs of decreasing over time. The existing surveys stress that there are strong links between non-use of the internet and poor education, unemployment or low income. Still, no significant actions have been taken to raise public awareness about the utility of internet. Public authorities largely focus on the supply side, namely technical and juridical questions. Other factors that explain the low penetration of the internet in France include the dispersion and lack of coordination of the different Ministries, and the low incidence of public-private partnerships. Cooperation with civil society organizations is also not promoted at an adequate level.

E-Government in Israel – Between Innovation and Catching-Up

Tal Sofer, ICTAF, Tel-Aviv University (tsofer@eng.tau.ac.il)

E-Government in Israel has been developing rapidly since the early 1990s and various programmes are in the final stages of development towards full, seamless e-Government. E-Government policy is constructed and managed by the e-Government unit at the General Accountants Division at the Ministry of Finance. The number of users of the e-gov portal increased to some 700,000 per month in 2005, following a major awareness-raising campaign launched that same year.

The e-Gov portal enables the downloading of forms and making of payments, and it provides information on land zoning and access to databases for victims of criminal acts. Most of the information from governmental agencies has been assembled in a way suitable for different target groups and in accordance with different issues, while several parts of the site are multi-lingual (Hebrew, Arabic, English). A support centre was established for citizens to inquire about available services, including information about the e-Gov portal and direct links to the requested information. The services that are predominantly being used are the payments systems. The governmental payments service includes 110 different types of payments. During 2004, a total of 1,900,527 visits to this particular service were recorded. This increased significantly during 2005 to a total of 3,530,696. One million payments totaling some 2.5 billion NIS (nearly 1 billion Euro) were made through the on-line payments services in 2005.

The work programme for 2006 includes two main objectives: first, broadening and deepening the services by adding contents and new services, new user guides and improving the cataloguing and the locating of information; second, personalization of the site, enabling easy access to information and services relevant to the individual user. Examples of new services include:

- A personal site (my.gov.il) – providing infrastructure for the establishment of a personal site for all citizens, in

which one may save information and services, as well as history of activities from the gov.il portal.

- A citizens' rights site in which one may anonymously search for rights and entitlements according to socio-economic criteria.
- An on-line services bureau – an extension of the on-line forms service, crossing boundaries between different governmental ministries and agencies.
- The on-line payments service will be expanded to include at least 50 additional government services, the development of new payment interfaces and connecting additional banks to the payment service.
- The Smart Card initiative has three components: 'Tamuz' targets government employees and will enable access to databases with electronic signature; 'Tadmor' targets businesses with frequent needs for government services such as lawyers and accountants; 'Telem' will enable physical and logical identification, as well as electronic signature for all citizens.
- The Safe project – a project aimed at enabling secure dispatch of documents from government ministries and agencies to the citizens. In this project, each citizen will have an electronic mailbox free of charge and accessible by using the smart card.
- The tenders service – the planned service will enable online participation in a tender process from the announcement to the submission of proposals.

The digital divide has nevertheless not decreased. Deprived or poor areas display low access to ICT; citizens living in these areas are often not adequately trained to use ICT effectively. Several initiatives address these problems:

- The 'Computer for Every Child' Project has distributed computers and provided instruction to over twelve thousand children across Israel.
- internet for the community: various organizations are involved in training and targeting elderly citizens and seeking thus to enhance inter-generational communication.
- internet for the disabled: A workgroup of the Israeli internet Association is developing guidelines for improving the user-friendliness of governmental internet sites.
- Promoting internet use within the Arab Community: the government plans the full translation of the gov.il Web Site into Arabic and the provision of relevant training material; training courses are also planned.

E-Government in Bulgaria – Problems with both Service and Access

Avram Eskenazi, Bulgarian Academy of Sciences
(eskenazi@math.bas.bg)

The Bulgarian e-Government strategy was published in 2003. The legal framework covers all issues relating to access to public information, implementation of electronic documents and electronic signature, personal data protection, protection of classified information, and the provision of telecommunication services.

The ICT infrastructure of the central public administration has achieved the level of consolidation: 90 per cent of all work places are equipped with computers and 80 per cent have access to internet. The situation at the local government level is less satisfactory: only 45 per cent of work places have computers; of these, only half have access to the internet. The situation with regard to internet presence is similar: while all central administration offices are online, only 47 per cent of municipalities can claim the same. The majority of municipal web sites are furthermore not suitable for use by older people or people with disabilities.

All the ministries, government agencies, and regional and local administrations are connected within the Public Administration Network. Most of the Ministries have their own networks and information systems. Databases containing information about the population, registered companies, administrative structures, and legal acts are in operation. An ambitious programme for ICT training of public administration employees started in 2006 targeting 10,000 trainees per year.

The implementation of e-signature is on-going, but still with a low level of usage due to the relatively expensive charges and limited number of electronic services. According to the report eBulgaria 2005 (www.arcfund.net), 60 per cent of the e-services for citizens and 45 per cent of the e-services for business have been realized.

The take-up level remains, however, very low: only five per cent of the citizens and 20 per cent of the companies use the available e-services. According to a survey performed in 2005, there are 28 per cent potential users of e-services among the citizens, and 56 per cent of the businesses have expressed an interest in using e-services. Currently, the most used e-service by businesses is the on-line VAT declaration: between 15 and 20 per cent of businesses use this service.

Overall, internet access remains a minority phenomenon in Bulgaria, thus access is still the key barrier to e-Government. Only 25 per cent of Bulgarians have access to the internet. Among the Roma, ethnic Turks and Bulgarian Muslims, access is even lower: only two per cent of Roma have access to the internet compared to five per cent of ethnic Turks and eight per cent of Bulgarian Muslims. Among

the main reasons for these figures are the limited opportunities for access to computers at home and/or at schools.

Coming up in the next six months ...

October 2006

- Focus groups comprising 8-10 participants of low socio-economic background will be organized in each of the ELOST countries. The purpose of the focus groups are to obtain feedback to the ELOST survey questionnaire, and to discuss barriers to the use of internet and e-Government such as limited access; lack of skills; fears and concerns. The participants will furthermore have the opportunity to check out several governmental internet sites and provide feedback about their user-friendliness.

November 2006

- Launch of the ELOST survey targeting citizens of low educational background and/or living in households threatened by poverty. The sample in each participating country amounts to 450 to 500 persons, we expect a minimum of 250 completed questionnaires in each (1500 in total). The fieldwork will run for a period of six to eight weeks till the end of the year.
- Tal Sofer of ICTAF is presenting the ELOST project at the IST Event in Helsinki 21-23 November. The ELOST project will be presented at a workshop entitled 'From Barriers to Benefits: Efficiency and Effectiveness of E-Government'. See http://europa.eu.int/information_society/istevent/2006/index_en.htm
- Lina van Aerscht of the University of Tampere is presenting the ELOST project at the international post-graduate conference 'Politics on the internet: New Forms and Media for Political Action' on 24-25 November.
- The Centre for Technology and Society and NEXUS Institute for Cooperation Management and Interdisciplinary Research have invited representatives of governmental authorities, low-socio-economic status groups and e-Government service developers to discuss barriers with regard to e-Government usage and ways to overcome them.

December 2006

- Completion of the online Delphi survey on emerging technologies and E-Government.

January 2007

- Processing of ELOST survey data and presentation of first set of tabulations
- Project meeting in Vienna on 23-24 January to discuss preliminary survey findings.

Reactions, comments, feedback?

We would be very happy to hear from you.

Contact Liana Giorgi at l.giorgi@iccr-international.org

We also welcome briefings on other projects, events, networking activities.