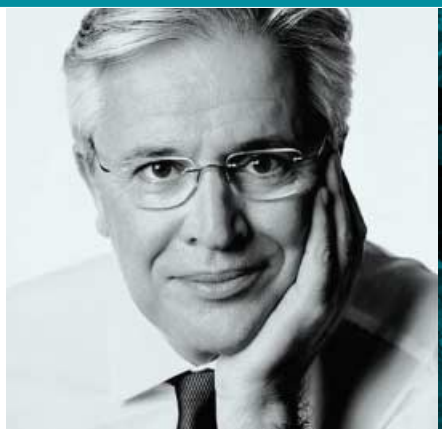
Deloitte.

TELECITIES
cities connect

eCitizenship for All

EUROPEAN BENCHMARK REPORT 2003



Joan Clos

TeleCities President, Mayor of Barcelona

Recommendation

Dear TeleCities Members,

It is my pleasure to announce the publication of the results of TeleCities first annual European benchmark survey on *eCitizenship for All*. The research assignment was undertaken in co-operation with Deloitte, one of the world's leading and largest professional services organisations. The survey, one of whose aims is having members learn from the success stories of others, has focused on four key challenges: eLearning and Inclusion, eDemocracy and Community Building, eSecurity, and Re-engineering of Local Public Administration.

On the occasion of the *eCitizenship for All* event in Porto on 26 November 2003, the results of the first annual European Benchmark Survey, captured in the only knowledge base on European municipal projects, were presented to our members. At the same time, the first *eCitizenship for All* awards were presented in recognition of what are seen as Europe's best practices. The winners were the outcome of deliberations by an independent jury. Brief descriptions of winning projects are appended to this report.

I believe that our European knowledge base represents an immensely valuable strategic tool for all members of TeleCities, and that it will help us to consolidate our work towards an inclusive information and knowledge based society. Together with the report, lessons learned and best practice awards, it represents a magnificent intellectual resource on which to build future progress. I would thus like to warmly thank all cities participating in the survey and those submitting their best practices for their enthusiasm and dedication. We look forward to a Europe wide participation of our members in 2004.

You are all invited, dare I say challenged, to participate in this year's edition of the *eCitizenship for All* initiative!

Joan Clos
TeleCities President, Mayor of Barcelona

prof. dr. Hans Bossert

Chairman Deloitte Public Sector Group, Europe MiddleEast Africa

Preface

Cities of Europe are exposed to many challenges in attracting, retaining and best serving their citizens and businesses. Over recent decades the impact of the computer, software, Internet, e-mail and the many downstream capabilities emanating from these have had an enormous influence on all our lives, noticed and unnoticed. In this context, eGovernment is increasingly impacting business productivity and people's quality of life. By web-enabling and streamlining activities such as permitting, licensing and reporting, governments can significantly ease regulatory compliance burdens, which, in turn, help fuel economic competitiveness.

The TeleCities-Deloitte public-private partnership represents an exquisite opportunity to take a major step towards the all-inclusive knowledge society. We have embarked on this by conducting the first pan-European benchmark study into the drivers of eCitizenship for All and providing TeleCities with Europe's first and most comprehensive knowledge base.

Deloitte has a thorough understanding of the challenges faced by Europe's ambitious cities and businesses and its aim is to provide cost-effective solutions. With the motto 'Citizen AdvantageTM', Deloitte introduces a new approach for evaluating the many returns on government investment in technology.

We look forward to working with the winners of the *eCitizenship for All* Awards 2003, by providing training facilities or conducting tailored eGovernment consultancy tasks. Deloitte enthusiastically supports Europe's ambition to become the world's most competitive and inclusive knowledge-based economy, in which the successful implementation of TeleCities lead-paradigm *eCitizenship for All* plays a pivotal role.

prof. dr. Hans Bossert
Chairman Deloitte Public Sector Group, Europe MiddleEast Africa

Management Summary

eCitizenship for All

The TeleCities first annual European benchmark survey on *eCitizenship for All* was undertaken in 2003 in co-operation with Deloitte. Its primary objective was to establish the status of eCitizenship and e-Government among TeleCities members by investigating the four key areas eLearning and Inclusion, eDemocracy and Community Building, eSecurity and Re-engineering, of Local Public Administration.

eLearning is the use of digital technology in the service of citizen education. Nine in ten participant cities saw eLearning a political issues. One third had an eLearning strategy and many used regional structures to deliver. ICT has entered classrooms but is not yet a fully integrated component of the educational process. Respondents were aware of excluded minorities such as the elderly, immigrants and handicapped and had created strategies and programmes focusing on many of these specific groups. The need for training represents a barrier to progress.

eDemocracy is the use of computer and related facilities in service of the democratic process. It is the adhesive between the top-down process of eGovernment and the bottom up process of eCitizenship. And at the heart of eDemocracy is the knowledge based city. eDemocracy is still in its infancy with many processes continuing to merit improvement. The process is facilitating democratic renewal and improving citizen participation. Most effects and benefits are still to come. e-Voting is still relatively untested. The cost of innovation remains an issue.

eSecurity is the process of data protection in its widest sense. eSecurity introduced currently lag behind the services and awareness of the security challenge. Over 85% of e-services incorporate personal information on citizens. One in four cities have intrusion detection processes in place. Barriers to progress include restricted awareness of new technology, and resistance to change. The larger a city the more it makes of advanced e-services and eSecurity.

Re-engineering of local public administration is the process of changing the means of delivery of traditional services to match the capabilities of the computer age. Participant cities broadly had electronic services high on their agenda for reasons of cost reduction and response to central government encouragement. Re-engineering projects tended to be more supply-driven initiatives from municipal authorities (inside-out) than demand-driven initiatives responding to citizen needs (outside-in). The main obstacles to further development and implementation are limited budgets and resistance to change. There is clear ambition to raise the level of interaction from the traditional one-way and two-way interaction to transactional and integrated service levels.

The survey confirmed that progress is being made towards all objectives but the rate of progress varied and there are still numerous obstacles to what may be seen as the ideal picture.

Contents

Figures

Tables

eCitizenship for All – towards the Knowledge Based City 1

1.1 Objectives

TeleCities is the major European network of cities committed to leadership in the Information and Knowledge Society. Established in 1993 in the framework of EUROCITIES, TeleCities is open to democratically elected city governments as well as to business and scientific partners. TeleCities provides a platform of over 100 local authorities from 24 European countries, sharing experience and developing practical solutions to achieve an Inclusive Information Society, both at European and local levels. TeleCities promotes eGovernment and eCitizenship amongst European local administrations in support of the development of policies and delivery of services that will enable all European citizens to equally benefit from the gains of the information and knowledge society.

These gains include the right of all citizens to access public services in the most effective way, to actively participate in local public decision-making processes that affect their quality of life, and this in a secure environment. By fostering the role of local authorities in achieving these aims, TeleCities supports the European Commission in a fuller implementation of the eEurope 2005 Action Plan to become the most competitive and inclusive knowledge-based economy in the world, including the challenges of the EU enlargement. Under the motto *eCitizenship for All*, TeleCities is promoting an inclusive information society at city level, by focusing on the implementation of the challenges of eLearning and Inclusion, eDemocracy and Community Building, Re-engineering of Local Public Administration and eSecurity.

TeleCities and Deloitte have launched the *eCitizenship for All* initiative, the aim of which is to undertake an annual pan-European benchmark survey into the state-of-the-art of eGovernment in TeleCities' member cities. Using the latest web technology, Deloitte is annually collecting and assessing relevant information at city level relating to each of the four challenges. The survey findings are captured in TeleCities' European knowledge base to which the members of TeleCities have exclusive and free access. The knowledge base represents a valuable tool for European cities to benchmark themselves against each other and provide scope for learning and knowledge sharing. In the context of this initiative, cities participating in the survey can also nominate themselves for the annual *eCitizenship for All* awards by submitting their local best practices. The projects were evaluated and nominated for the awards by an independent jury, with representation by eGovernment specialists from the European academic world and business. The award winning projects distinguish themselves in terms of their contribution to innovation, fulfillment of user needs, sustainability and transferability and hence the implementation of *eCitizenship for All*.

1.2 Description of the survey methodology: *eCitizenship for All*

The targets of the various components of the *eCitizenship for All* programme were firstly described. These were then converted into survey questions by Deloitte and TeleCities to reflect the actual status and information required across the four sections. Various types of questions (closed, open, pick) were used to obtain a maximum of reliable and comparable information from cities not working in their own mother tongue. The survey questions were evaluated, polished and the survey document finalised.

All members of TeleCities received early 2003 an e-mail in which they were invited to complete a set of survey questionnaires from a secured Internet site. They were asked to complete at least the general section on eCitizenship and if possible to complete the four subordinate sections (Re-engineering, eLearning, eSecurity and eDemocracy). These were filled out in the second half of 2003, analysed and evaluated by Deloitte. The written results of this work are presented in the following five chapters.

1.3 The survey

Members of TeleCities were invited to answer various questions on the four specific challenges and provide general information on relevant city features such as size, reasons for introducing eGovernment, channels used to deliver e-services and recent developments.

The 2003 survey was therefore divided into five parts: general information and the four challenges. The open, closed and pick questions asked provided insight into which e-services were currently being offered, how they were taking over from traditional means of delivery, security of data, problems encountered, and the challenges cities faced in eGovernment. The five parts of the survey were independent in that one part of the survey did not have to be concluded before another part was answered. It was possible not to answer

certain parts. The general part of the survey however was obligatory.

To contribute best to the achievement of the knowledge based city, all data is stored and exclusively accessible to TeleCities' members in a web-accessible database.

The final response for the general part of the survey was received from 73 of the total 120 member cities, or 61% of the sample population. This means we have reached the targeted response of 60% of members in the first year of the survey. Response to the individual sections was more restrained. Figure 1 gives an overview of response per part of the survey.

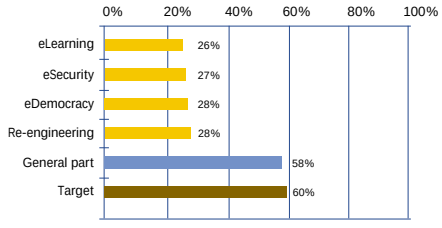


Figure 1: Response to surveys

Experiences with the 2003 survey questions and reactions from respondents will contribute to the ease of use of any future survey and the usefulness of results.

eCitizenship for All – general response

	Number of TeleCities Members	Participants	Survey response	Number of TeleCities Members	Participants	Survey response
north		**west**			**east**	
Denmark	5	3	60%			
Estonia				1	1	0%
Finland	6	6	100%			
Sweden	7	7	100%			
central		**west**			**east**	
Austria	2	2	100%			
Belgium	3	2	67%			
Czech Republic				3	3	100%
France	10	4	40%			
Germany	11	6	55%			
Hungary				1	1	100%
Ireland	2	0	0%			
Netherlands	6	5	84%			
Poland				4	2	50%
United Kingdom	15	9	60%			
south		**west**			**east**	
Croatia				1	1	100%
Greece				3	1	33%
Italy	14	7	50%			
Malta	1	0	0%			
Portugal	2	1	50%			
Slovenia				2	1	50%
Spain	18	10	56%			
Turkey				1	1	100%
Total participation	**102**	**62**	**61%**	**16**	**11**	**69%**

Table 1: General response *eCitizenship for All*

The north of Europe was well represented in the survey and the degree of east-west participation of cities was similar. Some half of the survey participants were from Central Europe. Cities from the whole of Europe were thus well represented in the survey.

The table below shows the names of participant cities by population and country. City size varied from medium sized towns of below 50,000 inhabitants to major international urban complexes of over 1 million inhabitants. The range gives a fair representation of the size distribution across the urban infrastructure of Europe

Cities < 50,000	Country
Frederikshavn	Denmark
Naestved	Denmark
Koper	Slovenia
Totana	Spain
Hudiksvall	Sweden
Ronneby	Sweden
Tranås	Sweden
Cities 50,001 – 100,000	
Hradec Kralové	Czech Republic
Amaroussion	Greece
Grosseto	Italy
Siena	Italy
Reus	Spain
Viladecans	Spain
Yalova	Turkey
Cities 100,001 – 250,000	
Linz	Austria
Rijeka	Croatia
Aalborg	Denmark
Metz	France
Cannes	France
Espoo	Finland
Oulu	Finland
Tampere	Finland
Turku	Finland
Vantaa	Finland
Hagen	Germany
Livorno	Italy
Eindhoven	Netherlands
San Sebastian	Spain
Terrassa	Spain
Linköping	Sweden
Birmingham	United Kingdom
Kingston upon Hill	United Kingdom
London Borough of Camden	United Kingdom

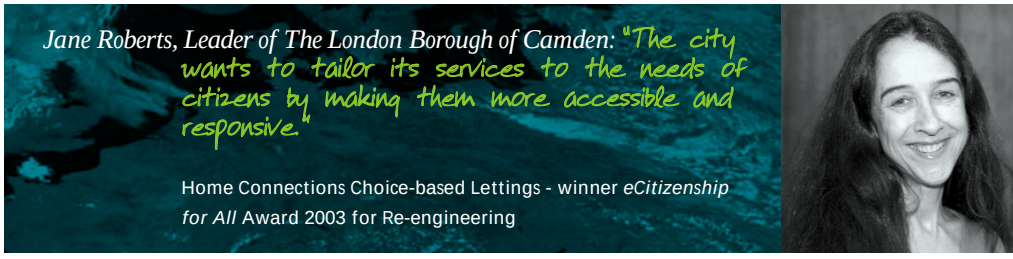
Cities 250,001 – 500,000	Country
Antwerp	Belgium
Ostrava	Czech Republic
Lyon	France
Nice	France
Bonn	Germany
Bari	Italy
Bologna	Italy
The Hague	Netherlands
Utrecht	Netherlands
Katowice	Poland
Gdansk	Poland
Porto	Portugal
Bilbao	Spain
Gijón	Spain
Uppsala	Sweden
Gothenburg	Sweden
Edinburgh	United Kingdom
Liverpool	United Kingdom
Manchester	United Kingdom
Newcastle	United Kingdom
Cities 500,001 – 1,000,000	
Brussels Capital Region	Belgium
Vilnius	Estonia
Helsinki	Finland
Bremen	Germany
Cologne	Germany
Leipzig	Germany
Turin	Italy
Amsterdam	Netherlands
Rotterdam	Netherlands
Valencia	Spain
Stockholm	Sweden
Glasgow	United Kingdom
Leeds	United Kingdom
Cities 1,000,000 >	
Vienna	Austria
Prague	Czech Republic
Munich	Germany
Budapest	Hungary
Rome	Italy
Madrid	Spain
Barcelona	Spain

Table 2: Members of TeleCities participating in the survey

Re-engineering 2

2.1 Objectives

The objective of this section of the enquiry was to establish the character of current service provision, the channels used for this and level of interaction in providing them. Conclusions show the most important results.



2.2 Description of the populations

Of the 120 TeleCities participating in the enquiry, 69 (58% of participants) answered the general questions on Re-engineering on the strategic issues of eGovernment, and 34 (28%) answered the more detailed questions on e-service levels, project experience and future prospects. Both research samples demonstrated strongly similar characteristics. This allows the conclusion that results from the 34 cities are representative for the other 69.

2.3 eGovernment policy

To the question whether a city had an eGovernment policy, 59 cities (86%) claimed to have one. The questionnaire did not specify how formal and explicit this policy was.

The most important reasons claimed for introducing an eGovernment policy were:

1. Reducing costs for city, citizens, trade and industry
2. Citizen and commercial demands to upgrade services
3. Streamlining the internal organisation
4. Raising productivity
5. Improving performance

Irrespective of the size of city responding, it was clear that most were actively concerned with developing eGovernment policies. The reasons for introducing eGovernment where varied but dominate by the aim to reduce costs, to improve services to citizens and to respond to legislation.

The emphasis here lies on cost reductions for the provision of services to the citizen and business in contrast to simple improvement of the services. Groups targeted by cities' web sites were almost exclusively (93%) 'citizens in general'. The type of services targeted included 'over the counter' services (43), telephone (14) and website (11). No less than 58% of eGovernment services were delivered in the old way 'over the counter'.

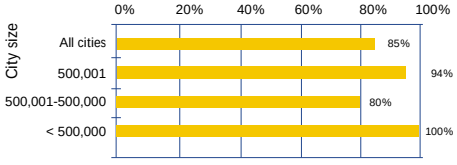


Figure 2: Cities with an eGovernment policy

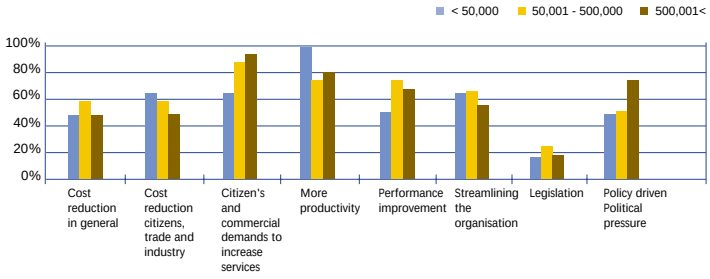


Figure 3: Reasons for introducing eGovernment

2.4 Channels and levels of providing e-Services

There is a great variety of channels used by cities to provide services to citizens and business. The role of these is shown in figure 4. All cities responding had a website which is used as intensively as postal, telephone and e-mail services. The website is now a fully accepted and integrated contributor to eGovernment.

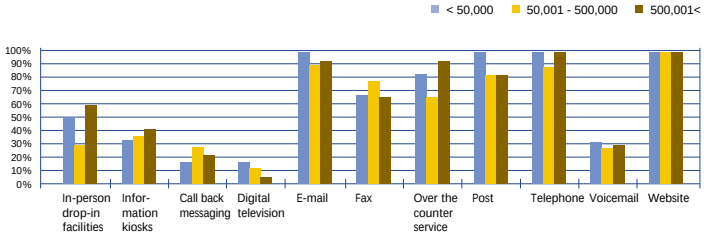


Figure 4: Channels used to provide services

Major challenges faced in implementing e-services along these channels included:

- changing culture (lack of interest, conservatism, border-struggles)
- changing organisation (workflows, low level of knowledge, data-ownership)
- budget shortfalls
- connecting new and old ICT systems
- very strict or incompatible security and (privacy) legislation from national governments

The general trend in the development of the level of interaction between the municipality and its citizens is clearly from the traditional one-way provision of information to transactional and integrated levels of interaction. This process is taking place at widely varying speeds across the different service packages and participating cities. Many expressed the conviction that raising the level of interaction with citizens would raise their involvement and local administration's response to their needs. The larger cities are clearly making faster progress in raising the level of interaction to provide e-services than the smaller cities. The responses shown in figure 5 suggest that within the foreseeable future transaction and integration level activity will represent the majority of a city's involvement with its citizens.

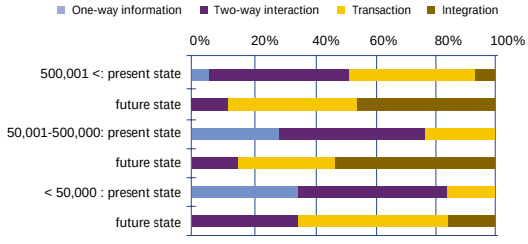


Figure 5: Interaction levels used to provide e-services

Definition of interaction levels
One-way information: presenting information to the citizens and business concerning e.g. education, general citizens information, tax information, employability services, environmental and town services
Two-way interaction: information is exchanged on some services (e.g. tax data exchange, online requests for information, ordering personal documents by citizens)
Transaction level: integration of various systems and services as these services concern e.g. data related to online payments, making reservations or registrations with real-time booking and confirmation
Integration level: all systems used are integrated such that many essential follow-up actions are undertaken automatically

2.5 e-Services provided to citizens

A selection of e-services provided to citizens of participating cities is shown below together with an analysis of how these services are actually provided. Table 3 shows the number of cities offering these e-services to citizens.

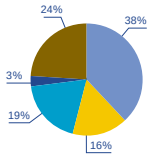
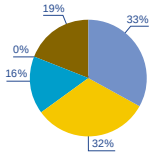
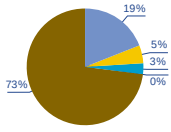
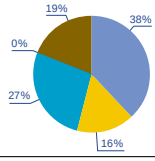
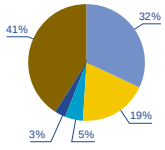
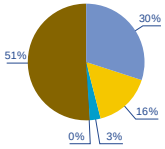
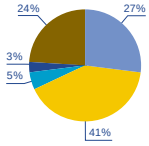
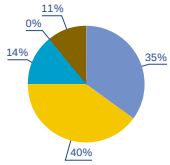
e-Services provided to citizens	Number of cities (34)	Percentage	Interactiveness of service
Tax services: information about tax, fiscal rules, attribution status, procedures, house values, online tax registration and payment	28	74%	
Education information services: information for students, parents and teachers, registration, communication teacher-parents, payment for school transport	30	79%	
Public safety services: information about health and safety precautions, about car parking, links to the police site	10	26%	
Citizen services: application forms for registering births/marriages/deaths, certificates, address changes, identification papers	30	79%	
Health care services: counseling, child welfare, mental health, disabilities and a database of doctors	22	58%	
Employability and income services: information on unemployment, courses, employment possibilities, city benefits for unemployed and statistical information	18	47%	
Environmental/ town and country planning services: information (water, ground electricity), interactive planning groups, discussing and complaint groups, online building permits, payments	28	74%	
Welfare services: information about history & culture, heritage, sports, tourism	33	87%	

Table 3: e-services provided to citizens

A variety of e-services is already provided to citizens. The e-services are provided primarily through one-way and two-way interaction levels. Although e-services on the areas of tax, citizen service and education are well on their way to the transaction level.

2.6 e-Services provided to business

A selection of e-services provided to business is shown below together with an analysis of how these services are actually provided. The table shows the number of cities offering these e-services to business.

Services provided to both citizens and businesses are currently dominated by one-way and two-way levels of interaction. It is clear that the website is taking over the major role of one-way communication although over the counter transactions still dominate in the domain of activities requiring interaction between citizens and administration.

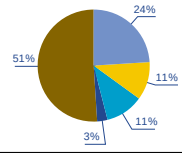
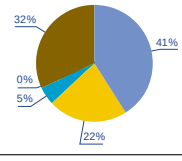
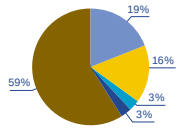
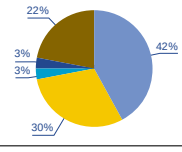
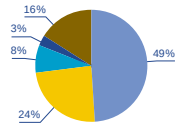
e-Services provided to business	Number of cities (34)	Percentage	Interactiveness of service
Local rate-payer services: link to federal tax website, information about tax, fiscal regulations, downloadable forms, online payments and online calculation on land-tax	18	47%	
Employability and income services: information for entrepreneurs, small businesses and international organisations, online tenders, online subsidies	25	66%	
Local business services: business environment, starting up requirements, transport licences	15	39%	
Environmental/ town and country planning services: town planning, roads, environmental monitoring systems, industrial sites	29	76%	
Traffic and transport services: infrastructural plans, roadblocks, transport strategies	31	82%	

Table 4: e-services provided to business

2.7 Experiences with eGovernment

Below are shown brief analyses of responses to questions associated with perceptions of eGovernment.

The majority of cities stated that all their internal departments worked together on eGovernment work and all cities mentioned many departments. The Mayor's office, economic and finance departments and public relations were most commonly cited. Most cities worked together with other organisations, mostly their local and regional authorities. Most outsourcing of services concerned information technology and publication services, especially the more complex web design, software development and maintenance services necessary. Many cities had no outsourcing deals. As to the likelihood of outsourcing in the future, many cities said they did not wish to, some had no plans, some showed interesting applications in such areas as investor information, tax payment, web recruiting, tourism and call centers. While many cities are not considering outsourcing, some are investigating applications requiring know-how unavailable in-house.

Many cities have implemented e-projects. Frequently cited were city websites or portals with local information, transaction services for citizens, school and learning projects, digital maps and geographic information systems, live broadcasting on-line of council debates, library access, and payment of taxes. All cities had a city website and attached a wide variety of applications to it.

Participants were asked which of their own eGovernment best practices they would like to share with other cities. Three wished to share all their best practices, five wished to share none of them. Various best practices were mentioned including eLearning, effective websites, and geographical information systems. Various best practice applications were also proposed including city cards, health information exchange, environmental systems, vehicle removal, electronic payment systems, e-civil society and various transaction services. There were clearly many eGovernment best practices to be shared.

To the question as to what level of eGovernment cities expected to achieve over the next two years city goals clearly focus on transaction and integration services, in other words progressing from the simple information provision function to the undertaking of full transactions between the city and citizen or business. All cities expressed significant ambition in raising the level of eGovernment over the foreseeable future.

As to how cities plan to achieve their eGovernment ambitions various elements were mentioned. Many cities had special programmes and specified projects. Re-engineering of processes, back-office and organisation, improving the website and introducing leading edge information systems, training of staff, and learning from others were all frequently mentioned. There was a wide variety of answers to this complex question with emphasis on new projects, education, communication and funding.

The major obstacles to progress were cited as financial, cultural, political, organisational, legal and technical. The most often cited was budget, followed by obstacles related to the nature of people such as changing habits and attitudes, political issues, opinion, interests, border struggles and bureaucracy. Technical issues also received frequent mention, including security.

2.8 Conclusions

There was great difference between levels of eGovernment of participating cities. Some had been very successful with total programmes, individual projects and many had ambitions and interesting plans for the future.

The major trigger for developing and implementing eGovernment initiatives was generally a reactive one targeting a reduction of costs and response to legislation. The external trigger of pressure to better serve citizens was less pronounced. The result is thus a greater internal focus on implementing projects.

Participant cities placed greatest attention on the following services: welfare (87%), traffic and transport (82%), citizen services (79%), environment and town planning for citizens (74%), environment and town planning for business (76%).

All cities had implemented a website for the delivery of information to citizens and to a lesser extent to local business. A substantial number of cities had initiated two-way communication and a lesser number transactional services, again mostly for citizens. It is clear that the website is taking over the major role of one-way communication although 'over the counter' transactions still dominate in the domain of interaction between citizen and administration. The website is now a fully fledged contributor to eGovernment.

eGovernment seems to be an issue on the agenda of many council meetings. Most cities have set up programmes, taskforces and projects some even having appointed senior managers responsible for eGovernment development and implementation. Ambitions for these projects are large, with most cities wanting to offer transactional services and integration of services over the coming years. This would mean a major growth in eGovernment service level. Outsourcing is not seen as a high priority as most cities are seeking to take on these tasks in-house. It is however seen as a probable necessity when seeking to reach eGovernment at an integrated level.

It is clear that the first priority will be to focus on efforts to implement two-way communication and basic transactional services both for citizens and business. Greater use should be encouraged of the Internet and of the effectiveness of links between front-office and back-office processes. The large differences in phase of development and sophistication of services between collaborating cities suggests that there will be great benefit to be gained by information and experience exchange between TeleCities members.

The Re-engineering of e-services in municipal administrations is a complex and broad issue. It concerns many different services, many different methods of delivery and a wide variation in the sophistication of these by participant city. There is a clear trend to upgrading the level of sophistication and this is forecast by participants to continue. However, there are many barriers to be overcome. It is certain that the learning process made possible by the TeleCities knowledge database and exchange of experiences between member cities will play a great part in accomplishing these challenges.

eLearning and inclusion 3

3.1 Objectives

The objective of this section of the enquiry was to establish the character and status of eLearning in the participating cities, the recipients and channels employed, and future plans. Conclusions show the most important results and some paths being followed.

3.2 Description of the populations

Of the 120 TeleCities participating in the enquiry, 61 (51%) answered the general questions on eLearning covering the more strategic issues of life-long learning and eLearning, and 31 (26%) answered the more detailed questions on eLearning project experiences and future prospects. Both research samples demonstrated strongly similar characteristics. This allows the conclusion that results from the 31 respondent cities are representative for the other 61.

To the question whether life long learning was on the political agenda 53 (87%) of participating cities answered in the affirmative suggesting that life long learning is indeed a specific political issue in almost nine out of ten cities. Almost half considered it to be of significant importance. This involves a wide group of interested parties, with a high political involvement and a remarkably high representation of ICT interests.

As to a written eLearning strategy, 19 cities (31%) have this in the form of a discussed, prioritised and planned systematic programme addressing various target groups. These included citizens in general, primary school students, young people approaching the labour market, the elderly and socially or culturally excluded groups. All confirmed eLearning strategies thus target citizens in general with more than half addressing specific target groups.

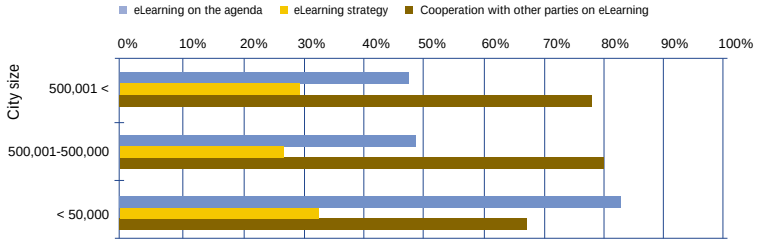


Figure 6: eLearning policy and structure

To the question as to whether the respondent city had created any form of internal organisation to address and support the eLearning challenge 35 (57%) answered in the affirmative. This suggested that the majority of cities had set up or were in the process of setting up special organisations or departments with dedicated resources to further develop and implement eLearning services for citizens. The form of this varied from the creation of a specific knowledge or organisational unit, assigning one or more individuals to the task, or creation of an ad hoc administrative body to be co-ordinated in (council) meetings. Most cities had thus dedicated an organisational unit with special budgets or with specific financial resources to accomplish the tasks.

As to the role of regional partnerships in defining and implementing eLearning and life-long learning, 35 (57%) of cities confirmed they were participating in some form of regional partnership. Institutions playing a role in these included other cities and municipalities, county departments, central government institutions, NGOs, eLearning vendors and other private companies. This suggests that cities work closely with both regional political authorities and private companies. More than half of the cities had taken the role of lead partner in this process although many cities emphasised the role of local universities.

3.3 Opportunities and access

Whether cities provide life-long learning opportunities by ICT to citizens in their own homes, 38% replied positively. The channels used included city portal, on-line access, and other portals. More than one out of three cities had thus developed initiatives to enable citizens to have access to education from their own homes. A clear alternative to this was the provision of education facilities in the community. 15 cities (44%) had launched initiatives focusing on citizens' use of ICT in the community at libraries, special web locations funded by the city, and free access to ICT at other public buildings than libraries such as social and information centers and the town hall. General access to eLearning has been concentrated on the establishment of portals and training programmes.

Other actions being initiated to promote eLearning in the community include:

- facilitation and funding of pilot projects
- providing free basic ICT training
- information services and communication
- networking and linking interested parties

To the question as to a city's formal responsibility for any part of the local educational system 7 cities indicated that they had no responsibility for any part of their educational system. Many cities naturally did carry responsibilities included that for primary schools (25), secondary schools (19), adult education (14) and education for youngsters approaching the labour market (11). None carried responsibility for universities and post-graduate education. It should be noted that there is wide variation in the national structures for organising and financing education.

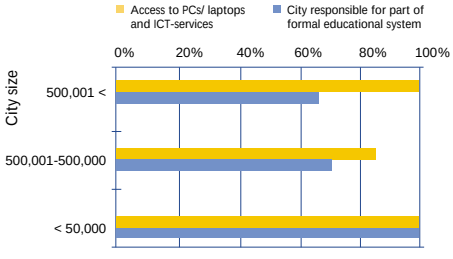


Figure 7: Responsibility for a part of education and access to PC's/ laptops or other ICT services for students

To the question as to how many school students have access to computers, Internet and other ICT facilities in their jurisdiction, all cities reported that all students in their cities have access to PCs or laptops at school. In 18 cities children could use stationery PCs in the classrooms, while 6 cities had provided children the use of portable computers for individual use. All schools had access to the Internet. The numbers of PCs and laptops varied from one per student to more than 50 students per laptop. The use of ICT as a means of training integrated in the educational process varied from highly to partly integrated. In conclusion it is clear that ICT, Internet and computer use have seriously entered classroom life across Europe. Every student has access to both PC and Internet however use of the computer as a means of education varies from city to city.

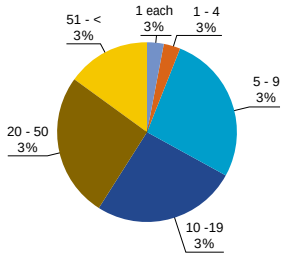


Figure 8: Number of students per PC/ laptop

A majority of cities (59%) are planning major investments to expand the numbers of computers, laptops and multimedia tools in education. It is clear that a general technological upgrade is in progress. However this is coloured by the discovery that there is a clear need for training teachers in ICT skills and some major challenges are faced by cities in this domain.

To the question as to whether a city considers eLearning to be a means to avoid social and cultural disadvantage translating into life long employment disadvantage, (79%) of cities considered eLearning to be a means to contribute to this problem. In 7 cities eLearning has been integrated into the service strategy towards excluded groups. In 11 cities eLearning is one of 'several means' being pursued. A majority of cities are convinced of the potential for eLearning to prevent social and cultural disadvantage.

eLearning success stories

- ***Cologne*** (Germany) – Internet bus for senior citizens and courses, information and support for the elderly.
- ***Edinburgh*** (United Kingdom) – Over 300 PCs with free Internet access at local libraries.
- ***Espoo*** (Finland) – *Osteri.net* is a joint service offering use of networks as a tool for learning and an environment in which new work methods are created for schools and beyond. Also 400 PCs are free accessible in the city's libraries.
- ***Glasgow*** (United Kingdom) – the *Schools out of Glasgow* project targets improvement of the performance of disadvantaged children by teachers home to home and Glasgow offers The *REAL* partnership as a network of learning centers around the city providing support, learning and information resources.
- ***Gothenburg*** (Sweden) – the *Knowledge Net* is a teaching portal where teachers and pupils communicate, co-operate, Internet and are guided in this by an editorial staff of school librarians.
- ***Kingston–upon-Hull*** (United Kingdom) – *City Learning* is a life-long learning partnership with a dedicated executive group monitoring progress against the eLearning objectives and Kingston-upon-Hull offers one PC/ laptop per student in primary and secondary schools.
- ***Metz*** (France) – Free access and training workshops at 40 terminal Multimedia centers in socially disadvantaged neighbourhoods.
- ***Naestved*** (Denmark) – Six specialised datashops with PCs and an estimated 50,000 visits a year.
- ***Rome*** (Italy) – *Nonni* on the Internet is an initiative in which school students teach the use of the PC and Internet to the elderly in the region.
- ***San Sebastian*** (Spain) – *eDonastia.net* is an integrated learning service for citizens.
- ***The Hague*** (Netherlands) – The *Residentienet* is a city-wide group of ICT contact centers.

As to whether a city had initiated eLearning activities to support the position of the regional unemployed, the disabled, the elderly, ethnic minorities, and the socially marginalized, significant numbers of respondents reported having launched projects targeting these groups. They varied from providing basic or tailored training in ICT, information services and communication, networking with interested parties, to facilitating and funding pilot projects. The majority of cities were clearly planning to use e-capabilities to the benefit of minority groupings.

A selection of some eLearning initiatives (success stories) indicative of the ways cities are supporting the regional educational challenge is shown above. The survey did not address the effects these programmes had achieved nor their 'spread' or dissemination across TeleCities membership.

3.4 Conclusions

Life-long learning is a specific political issue in three out of four respondent cities with involvement from a wide constituency of interested and motivated parties. The approach to the challenge is mixed with a third of cities having a written eLearning strategy, yet a large number addressing specific target groups and digital inclusion, and having a specific dedicated organisation and resource for eLearning.
The place of eLearning in regional structures is significant with many cities working together with partner bodies such as regional authorities and private companies. For over half the partnerships it is the city itself in the 'driving seat' in any regional partnership.

Access to eLearning is clearly being upgraded across the board. One city in three had taken initiatives to ensure citizens had access to training from their own home. Nearly half participating cities had established public web-places at such locations as libraries, town halls and information centers where citizens can obtain easy access to training.

The role of eLearning in the general educational system is also changing. ICT has now seriously entered the classroom in primary and secondary schools throughout Europe. Every student has albeit somewhat varied access to PCs, laptops and Internet. However the use of ICT as a means of teaching still varies widely from city to city. Investments in new hardware and a general technological upgrade are in process. There is a pronounced need for the training of primary and secondary school teachers with teachers' ICT skills and know-how still representing something of a barrier to the integration of ICT in education and a threat to the implementation of eLearning.

As to the power of eLearning to integrate excluded groups, most cities are aware of the capabilities of eLearning in preventing social and cultural disadvantage, thus improving employability. More than half respondent cities had implemented concrete initiatives to support the

interests of these groups in the form of information services and training in ICT as means to strengthen capabilities.

With the obvious potential of the digital revolution to deliver enormous improvements in the education process, it is clear that eLearning will develop strongly in the future. With and without the support of city administrations the increased penetration of computers, Internet and e-mail will bring improved skills and talents to all those who invest the effort to acquire them. The major barrier to progress is personal motivation, something that perhaps the city could also take a role in.

eSecurity

4

4.1 Objectives

The objective of this section of the enquiry was to establish the status of the security of eGovernment at TeleCities members participating in the survey with the purpose of highlighting the type and degree of future measures to be taken. This covered the protection of personal information and confidential political data and protection against intrusion. Conclusions show the most important results and some paths to follow.

4.2 Description of the populations

Of the 120 TeleCities participating in the enquiry, 61 (51%) answered the general survey questions. A total of 32 cities (27%) answered the more detailed questions on eSecurity. Both research samples demonstrated strongly similar characteristics. This allows the conclusion that results from the 32 respondent cities are representative for the other 61.

4.3 eSecurity policy and plan

Two out of three cities participating reported they operated with a formal security policy. 53% of participants had an information security plan with 88% (60) employing a security manager or workgroup giving the subject daily attention, and 6% (4) giving the subject weekly attention.

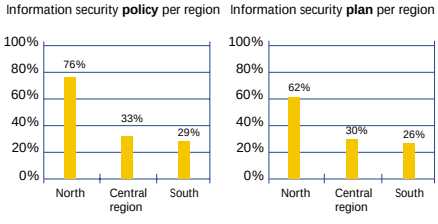


Figure 9: Information security policy and plan per region

Security plans primarily focused on the following:

- risk analysis
- physical security
- sharing information
- access control
- software development
- continuity planning
- personnel

4.4 eGovernment services and eSecurity

Participating cities employed a variety of systems to assure the continuity of eGovernment services with 25% employing up to three separate continuity enhancing measures. Primary measures employed were continuity planning, restoration procedure, internal back-up, external back-up, and fall back facilities. The security facilities were by and large not well structured.

The majority (94%) of cities provided eGovernment services. In some cases this was subcontracted to an external specialist. The cities stated that the information provided through e-services contained personal data and publicity, politically and socially sensitive information.

In terms of access limitation, 8 out of 10 cities have a firewall in place but this was the only measure to be broadly implemented. With 87% of cities providing interaction related eGovernment services this implies a need for a higher level of information security than in the case of simple information provision. With services logically involving much personal information this again emphasises the need for good security. The rate of subcontracting activities is low so most cities take key measures themselves.

Cities responded in the following ways to attempts to obtain unauthorised access to government information. 22% took no action, 9% indicated the event, 28% indicated and registered the event, 16% indicated, registered and reported the event and 25% went all the way to taking action. One out of four cities has a fairly complete intrusion detection process in place, three out of four cities take little action in the event of intrusion and tend to behave in a rather passive manner.

To the question as to which types of intrusion detection process a city uses, 15% reported burglar alarms and host-based intrusion detection, 37% reported network based intrusion detection, 17% outsourced intrusion detection and 15% reported none in use. Therefore, some 80% of cities have intrusion detection tools in place but it is clear that these are not employed to their full capability.

Figure 10 shows the handling of detected intrusions. Whilst almost 80% of cities indicate intrusions, some 70% record them. However few cities actually undertake any action as a result. Bearing in mind the intention of many cities to develop services towards a more transactional and integrated format, attention will have to be paid to upgraded security measures and the prompt undertaking of action.

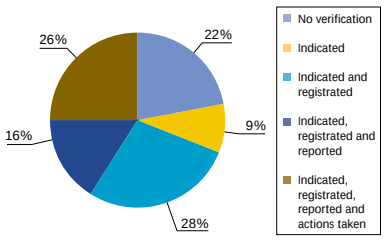


Figure 10: Detected intrusions and actions taken

Henning Scherf, Mayor of Bremen: "The city's main challenge is combining its long tradition of citizenship with becoming an ambitious modern minded partner through eGovernment."

Bremen Online Services - winner *eCitizenship for All* Award 2003 for eSecurity

As to protection from viruses and other intrusions 53% reported using both anti-virus and usage restrictions. One city reported using no anti-virus software. The fact that only just over half the cities participating reported the use of anti-virus protection is surprisingly small given the sometimes calamitous effects of a successful virus attack and the publicity given to the subject. The cities that were most externally oriented in their eGovernment activities were those which made greatest use of security systems.
As to the question what encryption methods were in place, 7% reported having symmetric encryption in place, 20% asymmetric encryption, 39% reported a secure socket layer, 9% reported outsourcing their encryption and 25% reported none. Two out of three cities thus use some method of encryption.

To the question if e-service levels were used and on what level the relatively small cities (< 50,000) offered their e-services primarily at the information and interaction service levels. The more advanced levels of providing e-services are restricted to internal users only.

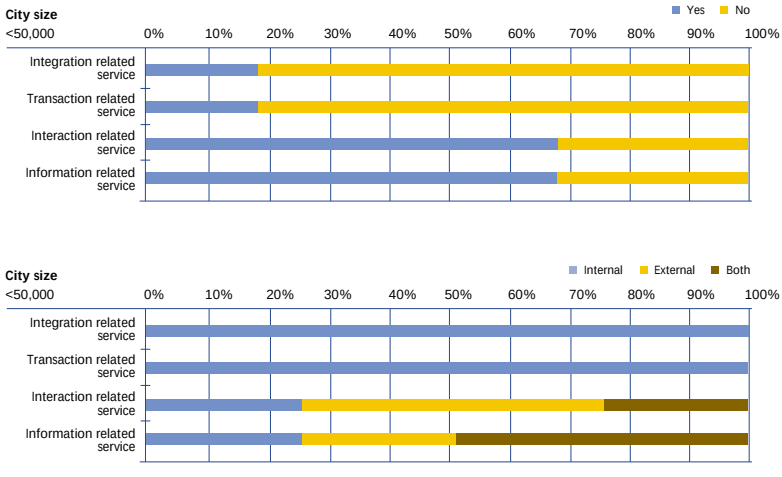


Figure 11: Levels of e-services (city size < 50,000)

The cities (size 50,001 – 500,000) offer their e-services through more advanced service levels and are also more oriented to external parties i.e. citizens and businesses.

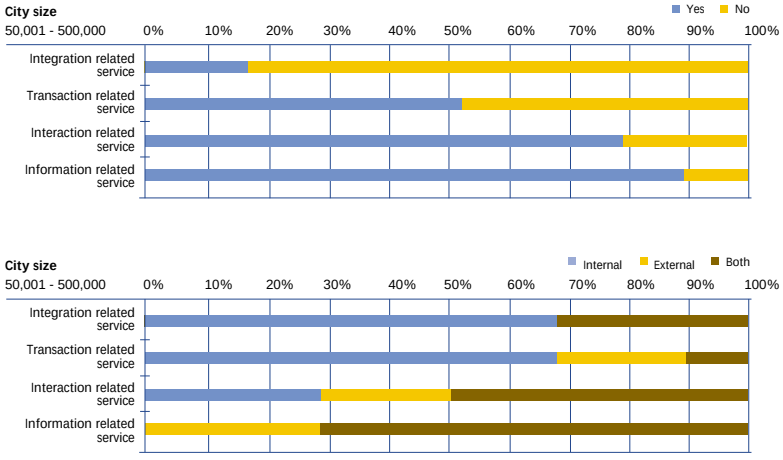


Figure 12: Levels of e-services (city size 50,000 – 500,000)

The largest group of cities (over 500,001 citizens) which use advanced e-service levels offer these to all groups (both internal and external).

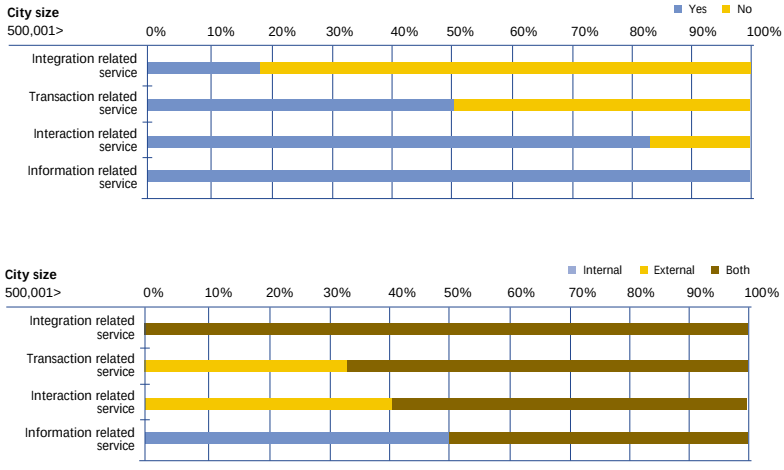


Figure 13: Levels of e-services (city size 500,000 >)

It was found that the larger the respondent city the more likely the city was to offer its eGovernment services on the basis of responding to market demand rather than repackaging traditional services with the help of the new digital channels. The larger the city therefore the more market-driven it was.

4.5 Conclusions

Analysis of the eSecurity status of survey participants suggests that levels of eSecurity currently lag behind development and provision of services. More than 85% of eServices include personal information on citizens and business, and of these cities 80% have intrusion detection systems in place. As to protection from viruses and other intrusions 53% reported using both anti-virus and usage restrictions.
The awareness of the security challenge is at a far higher level than the level of implementation. Again, as is the case with eLearning and Re-engineering, the potential for progress and improvement is significant. There are numerous barriers to progress varying from awareness of latest technology and systems to the resistance to change.
The larger a city the more it invests effort in e-services and eSecurity although security levels remain behind the level of offering e-services.

eDemocracy 5

5.1 Objectives

The eDemocracy section of the study addressed the current and future status of eDemocracy in the various cities participating and looked at plans for handling the challenges of process transition and population training. The conclusions show that eDemocracy is recognized as a positive contribution to facilitating democratic renewal and improving citizen participation.

5.2 Description of the populations

Of the 120 TeleCities participating in the enquiry, 61 (51%) answered the general section and 33 (28%) answered the more detailed questions. Both research samples demonstrated strongly similar characteristics. This allows the conclusion that results from the 33 respondent cities were representative for the other 61.

5.3 Information and communication services

As regards the status of information and communications services, all respondents reported they had informational websites. Other much used services are administrators' personal websites and information about city plans (e.g. city planning). Transactional capabilities were less prevalent. The use of informative e-mails to citizens, on-line publication of documents and meeting minutes, and citizen feedback to elected representatives were not widely used. Some 28% of respondents offered on-line rebroadcasting of city council debates. There was limited opportunity for two-way communication between elected representatives and the public.

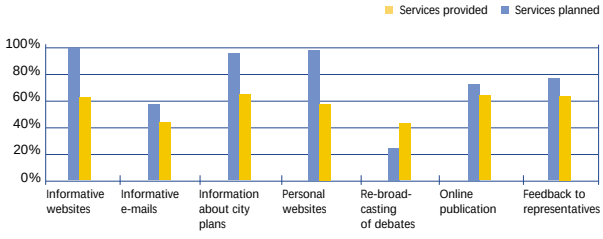


Figure 14: Information and communication services provided

To the question as to what information and communications services were planned for the following 12 months, 64% of respondents reported planning to expand their websites, mainly by rolling out services to other departments. There were also plans to extend service access through new channels such as mobile devices and develop capabilities such as search engines and links with other websites. Some 44% of respondents expect to offer rebroadcasting of council debates. One respondent had plans to create links to the local TV station. Other respondents mentioned the introduction of public terminals and on-line consultation panels.

As to what transactional services a city provides the most common form of these were e-mails to city departments (23%), representatives (21%) and community portals (17%). The focus was typically on annual budget, city planning and city strategy. The other forms (see figure 15) were also provided to some extent.

The subject of e-voting continues to be largely untested within the respondent population. Voting via e-mail, secure log-in, telephone, SMS or digital television from home; and touch screen kiosks at public places all showed negligible penetration. Touch screen kiosks at polling stations were used by 4 respondents

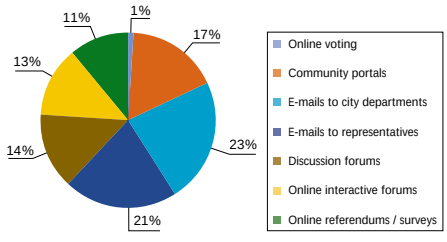


Figure 15: Transactional services provided

There was a wide variety of responses to the question what areas of improvement were needed. The most significant issues requiring improvement related to improving participation with the citizen and the link between consultation and policy making, and security. The individual services requiring improvement included surveys and referendums, discussion forums, e-voting, rebroadcasting and eLearning, knowledge management, new access channels and e-payments.

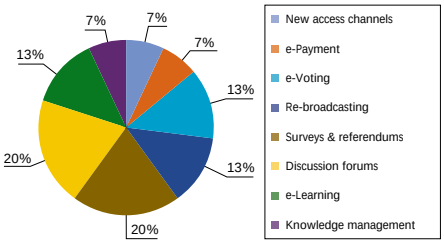


Figure 16: eDemocracy services requiring improvement

To the question as to whether cities had consulted with citizens to gauge attitudes towards eDemocracy, 41% answered in the affirmative. The approaches to consultation varied including complaints analysis, surveys and focus groups. 56% of respondents answered they had taken specific steps to address citizen concerns.
On the subject of the impact of e-voting on turnout, there was a general view that the public were keen on e-communications, but for administrative staff security was an issue. No respondents recorded an increase in turn-out as a result of e-voting. E-voting pilots at local elections in the United Kingdom had also previously shown no increased turn-out. The view was prevalent that e-voting was complex and training would be required to raise participation. To the question as to whether a satisfaction survey had been carried out to collect feedback on the performance of eDemocracy initiatives, 37% of respondents answered in the affirmative.

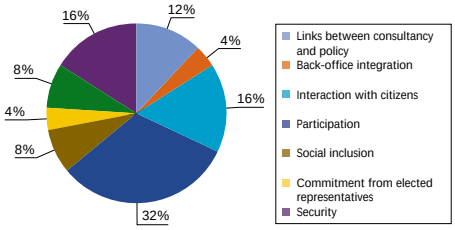


Figure 17: Other aspects requiring improvement

To the question of training citizens in eDemocracy services, 46% of respondents reported taking such initiatives. Keying in a range of third party providers was reported by 9% of respondents. Training was generally focused on specific groups most notably senior citizens (20%), immigrants (13%), other groups with specific needs (13%) or those otherwise socially excluded (6%).

As to publicity promoting components of the eDemocracy offering, 65% of respondents reported publicising their eDemocracy services with 19% of respondents targeting specific groups related to geographic locality, socio-economic groupings, young people and senior citizens. The publicity campaigns were of a general nature.

To the question as to whether any special provisions had been made to accommodate the needs of specific citizen groups respondents reported initiatives ranging from text reading software and audio for those with visual impairment, digital playgrounds and social programmes, to dedicated young persons sites, translation services, and free, often supervised access to the Internet. Of the 37 respondents, target groups included the visually impaired, the under-21s, senior citizens, those unable to speak the local language, the homeless, physically impaired and those with learning difficulties.

5.4 Conclusions

eDemocracy is still in its infancy and many of the processes involved in the eDemocracy offering were perceived by respondents as meriting improvement, also in regard to content. eDemocracy is viewed as making a positive contribution to facilitating democratic renewal and improving citizen participation. However, it is also recognised that it is only one element of participation and needs to be seen within the context of a wider agenda for democratic renewal and citizenship. There was consensus that e-services should have priority over eDemocracy and that the cost of innovation was still an issue.

Conclusions – from the present to the future 6

6.1 Conclusions

The primary challenges and conclusions deduced from the survey into the *eCitizenship for All* initiative are summarised under the four individual subject headings of Re-engineering, eLearning, eSecurity and eDemocracy.

The Re-engineering of local public administration and support services seeks to upgrade the spectrum, cost-benefit and quality of many services offered to citizens. It seeks to improve the ways in which citizens communicate with the services offered by the city. eLearning serves to raise the level of education of all and inclusion of disadvantaged minorities, raise the digital literacy of the population, and help all citizens benefit from the advantages of the information society. eSecurity surrounds the whole e-process to protect the traditional values of personal and corporate privacy and in general the integrity of all information. eDemocracy leads to greater community building, citizen participation and empowerment. In broad terms the survey confirms that progress is being made towards all these objectives but that the rate of progress varies and that there are numerous obstacles to achievement of what may be considered the ideal picture.

Re-engineering

The main conclusions of the Re-engineering section of the report are as follows. Participant cities see electronic services currently as high priority on their agenda. The major triggers for this are cost reduction and response to central government encouragement. Re-engineering projects tend to be inside-out rather than outside-in. In other words the initiatives are more supply-driven coming from municipal authorities than demand-driven responding to the expressed needs of citizens. The main obstacles to further development and implementation are limited budgets and resistance to change. There is clear ambition to raise the level of interaction from the traditional one-way and two-way interaction to transactional service levels.

eLearning

On the subject of eLearning, nine out of ten participant cities saw life-long learning and eLearning as political issues. One third of cities had an eLearning strategy and many use regional structures to create and disseminate the products of eLearning. In 50% of responding cities educational programmes are on-line. ICT has entered the classrooms but is not yet a fully integrated component of the educational process. Respondent cities showed a clear awareness of the significance of excluded minorities such as the elderly, immigrants, and handicapped and had created strategies and programmes focusing on many of these specific groups. The need for training of those involved represents a barrier to progress.

eSecurity

The levels of eSecurity introduced lag behind levels of development of electronic services. In two out of three cities citizens have access to government applications. More than 85% of e-services incorporate personal information on citizens. Four in five cities providing e-services have intrusion detection processes in place.
The awareness of the security challenge is at a far higher level than the level of implementation. Barriers to progress include restricted awareness of new technology, resistance to change and low levels of motivation. The larger a city the more is done on e-services and eSecurity although security levels remain behind the level of e-services.

eDemocracy

eDemocracy is still in its infancy. Many of the processes involved in eDemocracy were perceived by respondents as meriting improvement, also in regard to content. The process of eDemocracy is facilitating democratic renewal and improving citizen participation though this is still at an early stage of development and society has by no means seen all the resulting effects and benefits. The context for eDemocracy is seen as the wider agenda of democratic renewal and citizenship. Participants reported that the process of e-voting is relatively untested, and its impact thus not yet quantifiable. Providing e-services has priority over eDemocracy and cost of innovation is still an issue.

6.2 From the present to the future

The potential benefits to society of advances in the application of digital and information technology to serve the goals of eCitizenship are enormous and broadly perceived to be so. But barriers to change are significant. One can perhaps see the process in the same light as the introduction of universal suffrage. In the long term it offers a similar sea-change to the traditional democratic process. eCitizenship will bring citizens in direct contact with their representatives, there will be less need for slower formalised interaction structures, as source of data for politicians and local administrators the media will become less important, and yet another step will have to be taken towards the ‘perfect market’: every buyer knows everything about every seller. Users of eGovernment services will more often than in the past obtain satisfaction fast. One thing is certain,

the future holds wonderful developments and not a few surprises. It will be up to organisations such as TeleCities to guide, direct and advise in this remarkable process.

The barriers to progress are many and varied. While the survey did not attempt to map these in detail, the identification and quantification of barriers to progress will undoubtedly serve to highlight where efforts should be put to improve chances of the effective implementation of new ideas. Naturally the simple human reflex of resisting change is a key factor. The generation gap here is perhaps telling. Provided there is access to the technology the young are totally at home with the new digital society. By contrast, the older citizen, while often showing gallant attempts to catch up, is still fettered by having to unlearn old habits before adopting some very different new ones.

The access to computers and Internet is also naturally important. Public libraries across Europe are becoming more aware of their role as digital meeting point, indeed the computer has probably stimulated visits to them. Public authorities are likewise using some of their various locations to make computers and Internet access available to a wider section of the population. Including those sections of the population that have traditionally been disadvantaged such as the elderly, the handicapped and immigrant communities. With prices of soft and hardware dropping over recent time access to the computer is becoming easier for everyone, everywhere. But the greatest barrier to change is perhaps encapsulated in the first technical chapter – Re-engineering. Changes to an existing system in the short term benefit no one said Nicolo Machiavelli. It remains to be seen how changes force their way through the system.

Computer security is an issue that has been widely publicised. With the frequency of stories of virus intrusions now almost innumerable, security is no longer being seen as typically someone else's problem. It is something that touches us all. Add to this the fact that the whole process of eDemocracy involves personal data, often sensitive, sometimes confidential, and discussion of subjects that are likewise sensitive and delicate the question of security is important. The subject of security in general and the creation of computer system intrusion response teams (CSIRTs) in particular are subjects that will receive extensive attention over coming time. Many will await the results with interest.

In the process of eLearning the computer offers the most extraordinary opportunities. The Internet is today the greatest single easily accessible source of information known to man. It offers the potential to bring knowledge and wisdom to almost everyone, and in the form of life-long learning that so many have portrayed as route to massive social betterment. Barriers to its use are relatively low, it is cheap and accessible. But whether the mass of the population of western society uses it to its best effects will be a function of many factors not least user age, and removing the barriers of unfamiliarity, ignorance, and fear.

If eGovernment is seen as the use of the digital revolution in service of government challenges (top-down) and eCitizenship as the use of the digital revolution in the service of citizen challenges communicating with the body politic (bottom–up), then the knowledge city lies between these two and is simultaneously made up of them. In contrast to the processes mentioned it is the knowledge city that is the physical representation of the digital evolution in the hands of citizens and business. And for this reason it is why it is such a powerful player in the processes that will become ever more familiar to and commonly used by us all. The knowledge city is perhaps the key unit in favour of positive change. The knowledge city should be given every support it can use.

6.3 TeleCities new strategic framework "The Knowledge Based City"

TeleCities has understood the aforementioned lessons and given careful attention to the development of a strategy to answer the challenge. It is based on the concept of the knowledge based city. The generation and exploitation of knowledge is now the predominant process in the west in the improvement of quality of life and creation of wealth. The shift to a knowledge based society, prompted by new goods and services, is a powerful engine for growth, competitiveness and job creation.

TeleCities launches its new strategic framework the knowledge based city to take a step forward in promoting the evolution of a more inclusive information society. This will include all topics addressed over past years by TeleCities but also those emerging from the specific issues emerging in the information society.

The new strategic framework will continue to support all members in exchanging experience and developing concrete partnerships, but also to

ensure a strong and stable position of TeleCities vis-à-vis European institutions with a long-term perspective. The four challenges embedded in the new strategy will drive network activities to achieve these goals and to confirm that local authorities support the European Commission in a fuller implementation of the eEurope 2005 Action Plan by:

- overcoming the barriers to the development of Information Society
- ensuring Information and Knowledge society rights for citizens
- fostering the Knowledge based economy
- promoting the modernisation of local public administrations through eGovernment

TeleCities thus confirms its commitment that these risks be minimised and that the benefits stemming from this new society are granted to all citizens, local communities and businesses. This means that all cities need to adopt long term eGovernment strategies and visions, and use information and communication technologies to innovate and modernise. Only by doing this, will they be able to offer high quality information and the most advanced services, and contribute to the long term economic, social and environmental wellbeing of their citizens, businesses and social partners.

6.4 The *eCitizenship for All* survey and awards

The *eCitizenship for All* survey was first held in 2003 with results reported in 2004. It was the first such survey of its kind with numerous open ended, closed and pick questions. It had to be completed in English by many whose mother tongue was not English. While the target level of 60% participation was almost achieved, it is hoped that the future will see even greater participation and a rise in significant conclusions and recommendations. This will serve to upgrade the conclusions and put meat on the bones of the guidelines for the future. Survey results had to be analysed in the light of many factors. The process taught many lessons that will benefit future surveys.

Undoubtedly one of the most important functions of TeleCities is the sharing of experiences and lessons between members and the eCitizenship awards represent an excellent means of doing this and further stimulating involvement. And in that process of learning lessons from the past it is important not only to know what to do and how to do it, it is also important to know what to avoid doing. The learning process for both citizens on the one hand, and peoples' representatives and public servants on the other will be a critical element in process of putting the digital evolution effectively to work for all.

The 2003 awards were the product of an independent jury with participation of senior academics and business representatives. The profile and publicity attained will surely trigger the spread of the ideas and stimulate future participation.

Appendix – The Awards

The *eCitizenship for All* Awards 2003 for eGovernment projects

The awards are a formal recognition of the contribution of participants to the achievement of the many and various objectives of the *eCitizenship for All* initiative, particularly in the creation of best practices in the four key areas. In 2003, the *eCitizenship for All* awards were presented for the first time. The nominations were basically on the initiative of participating cities, the short list and winners the responsibility of an independent professional jury without links or connections to the nominees.

Why the awards

There were various reasons for creating and presenting these awards in the context of the *eCitizenship for All* initiative. Firstly, they included recognition to those city governments that had invested energy and funds in solving defined challenges within the arena of eGovernment and the knowledge based city. They would secure press coverage and exposure of the efforts of participating European city governments in the area of eCitizenship, as indeed they have done. It was also felt that they would motivate other cities to both participate in the award and make best efforts to solve their own specific challenges in innovative and cost-effective ways. They would encourage the dissemination of the ideas inherent in the projects of all award participants, not only the winners, to other TeleCities members and so extend the effects of the work of the winners. They would raise the visibility of local government in the public arena. Finally, it was a statement of support and recognition for the people who were behind the achievements – the people who are normally far from the public spotlight. The judging panel consisted of nine people (of nine nationalities) selected for their qualifications and experience in the world of business and academia.

Members of the *eCitizenship for All* Jury

- Prof. Alfonso Molina – Chair, University of Edinburgh
- Ms. Ylva Johansson, CEO Att Veta AB, Stockholm
- Prof. Antonio Alabau, University of Valencia
- Prof. Herbert Kubicek, University of Bremen
- Prof. Ari-Veikko Anttiroiko, University of Tampere
- Prof. Kim Viborg Andersen, Copenhagen Business School
- Prof. Herman Matthijs, Free University Brussels
- Prof. René Wagenaar, Technical University Delft
- Prof. Philippe Adair, University Paris XII Val de Marne

Projects were nominated for the awards by the independent panel of experts on the basis of contribution to innovation, fulfillment of user needs, sustainability and transferability in each of the four categories of Re-engineering, eLearning, eSecurity and eDemocracy. The four winners are:

- Re-engineering – London Borough of Camden (United Kingdom)
- eLearning and Inclusion – Helsinki (Finland)
- eSecurity – Bremen (Germany)
- eDemocracy – Tampere (Finland)

The finalists of the *eCitizenship for All* Awards 2003

	Status	Challenge	Cities	Projects	City representatives
1	Winner	eSecurity	City of Bremen	Bremen Online Services	Thomas Brimmer
2	Winner	Re-engineering	London Borough of Camden	Home Connections Choice-Based Lettings	Ninesh Muthiah
3	Winner	eLearning	City of Helsinki	Nettimanula (district of Helsinki)	Vesa Paavola
4	Winner	eDemocracy	City of Tampere	Participation Palette	Jari Seppälä
5	Honorary mention	Re-engineering	City of Glasgow	Sign Language Interpreting Service	Alex McPherson Bailie Alan Stewart
6	Honorary mention	eLearning	City of Edinburgh	MyEdinburgh.org	David Hillson
7	Honorary mention	eDemocracy	City of Turin	Torino Facile (Easy Turin)	Sandro Golzio Alessandro Battaglino
8	Finalist	Re-engineering	City of Aalborg	Digitizing Home Care	Kirsten Skovrup Anni Kjeldgaard
9	Finalist	Re-engineering	City of Stockholm	Stockholm Housing Mediation	Martin Ottosson
10	Finalist	eLearning	City of Glasgow	I:XSEED	Eugene Kelly Bailie Alan Stewart
11	Finalist	eLearning	City of Metz	MEDIANET	Jamal Baïna Christine Raffin
12	Finalist	eDemocracy	City of Espoo	Open Espoo	Simo Reipas Hilkka Ilola
13	Finalist	eDemocracy	City of Turin	TOWEB	Sandro Golzio Alessandro Battaglino

Table 5: The Finalists of the *eCitizenship for All* Awards 2003

The Award

Each of the four winning cities has been offered a free stand alone eGovernment consultancy by Deloitte in an area to be mutually agreed upon. Alternatively or in combination with the above, Deloitte will hold a top level eGovernment master class for the winners at the Nijenrode University in the Netherlands. The master class will focus on areas which are considered to be key for the effective delivery of eServices to citizens and the local business community.

Category Re-engineering

Winner: Home Connections Choice-based Lettings – London Borough of Camden (United Kingdom)
Home Connections Choice-based Lettings is a leading example of cross-Re-engineering, the new generation of Re-engineering approaches where the key beneficiaries are outside the local authority's formal organisational boundary. They are the citizens. Home Connection Service reverses the way citizens in need get public housing of their choice. Instead of receiving an offer after a long waiting time, home seekers now make a bid on their choice out of the published stock while assessing themselves for eligibility. It is an original system that increases transparency and ease of use. The choice of language includes Arabic, Bengali and Cantonese and a choice of communication channels includes web and interactive voice response. Transfer to other locations is already underway.

http://www.camden.gov.uk/

Special Mention: Sign Language Interpreting Service – Glasgow (United Kingdom) Sign Language Interpreting Service (SLIS) makes an imaginative and innovative use of information and communications technologies to re-engineer and effectively improve a service of critical value for deaf, hearing impaired and deaf-blind people. The project used an exemplary participative approach to Re-engineering, as the improvements were developed in partnership with the deaf community. The results are outstanding for a service traditionally frustrated by scarce resources. Today, deaf people have 24-hour access to booking services instead of just office hours. They have more choice and ready access to information sources and have become part of a more e-inclusive world that gives an increased recognition to Sign as a language. Simultaneously, administration staff and other personnel are now able to devote more time where it is most needed: providing direct service to users.

http://www.glasgow.gov.uk/

Finalist: Digitising Home Care – Aalborg (Denmark) Home care to elderly and disabled people involves professionals of various organisations in the same city. New technologies, as the e-Health European priorities state, could give a new boost to the sector in order to facilitate communications and enhance effectiveness. That is why the Digitising Home Care project of the City of Aalborg is best practice for its collaborative and innovative IT solutions. It helps medical professionals and public administration staff to register services related to the elderly, to plan programmes and to manage information.

http://www.aalborg.dk/

Finalist: Stockholm Housing Mediation – Stockholm (Sweden) Re-engineering with the help of ICT requires deep analysis of processes and a well-planned IT solution development. The first task is crucial for the second one to guarantee feasibility and effectiveness. The project Stockholm Housing Mediation succeeded in both phases and ensuring the key element of secured access. Housing offices visits and telephone queues will be drastically reduced by the new 24-hour Housing Online System.

http://www.stockholm.se

Category eLearning and Inclusion

Winner: Nettimaunula – Helsinki (Finland) Nettimaunula is an excellent example of the spirit of *eCitizenship for All*. The project is creating an advanced form of networking in which citizen participation and e-inclusion are central. Nettimaunula counts on high involvement and co-operation of local stakeholders (the unemployed proved an essential human resource). The innovative programme is for the benefit of the community and, particularly the sectors at risk of being left out. Nettimaunula offers cheap broadband Internet connections, free computing for those who cannot afford it, training on basic ICT skills, especially for the elderly, and a virtual community tool for local people to provide local content as well as to participate and interact on issues concerning the development of the community.

http://www.hel.fi/

Special Mention: MyEdinburgh.org – Edinburgh (United Kingdom)
MyEdinburgh.org is a pioneering public authority-supported community portal involving Edinburgh's colleges, universities and voluntary sector. It demonstrates the potential for, and trend towards, public websites which are knowledge utilities configured by citizens and communities for their own

needs. MyEdinburgh.org gives citizens customised access to information and learning opportunities in the City, through a user-driven content model and the provision of tools and facilities to support learning as a community activity. The site allows learners and providers to meet online, discuss issues and collaborate on joint projects. It provides each citizen with a personal information resource, effectively giving rise to an individualised site for each citizen; while in exchange for these benefits, organisations develop and maintain content. It is a true development of web space by the community for its own benefit.

http://www.edinburgh.gov.uk/

Finalist: I:XSEED – Glasgow (United Kingdom) Implementing e-Inclusion means undertaking at least the same numbers of actions and measures, as there are groups of people excluded from the information society. One of these is the project I:XSEED in the city of Glasgow, which seeks to accompany and guide people with learning disabilities to widen the use of electronic communication channels. Customisation and flexibility are key factors of success and the resulting sense of community between day centers and families through such features as a safe message board and discussion area is a clear sign of success. I:XSEED definitely highlights the possibility of using new technologies in a way that directly yet simply benefits people.

http://www.glasgow.gov.uk/

Finalist: Medianet – Metz (France) Medianet is helping people be aware of and contribute to the challenges of the disabled in accessing Internet and enjoying its benefits. It required all the right partners; technologists, researchers, political leaders, and users. Coordinated by the City of Metz, The Medianet project linked as partners the Family Association for Helping Kids with a Visual Disability of Metz (AFAEDAM), the Association of the Blind and Visually Impaired of Alsace and Lorraine (AAAL), the University of Metz, the ETIC and LASC Laboratories and Free & Alter Soft company. The Medianet platform is the result of a battle against the digital divide and eExclusion towards recognition of the effective contribution and involvement of a group of disabled. The partners in the MEDIANET Project resolved a problem of the whole community.

http://www.metz.fr/

Category eSecurity

Winner: Bremen Online Services – Bremen Bremen Online Services, Bremen's eSecurity project, offers citizens more than 100 on-line transactions with proper security, including electronic signatures on smart cards. The project aims to upgrade the city's level of eGovernment and provide a means of making on-line transactions and payments in a secure, responsible and legally correct manner. It targets citizens, businesses and intermediaries. The quality of service has increased and significant savings achieved by eliminating much government paperwork. The project is part of a public private partnership of the city of Bremen and regional and national partners in the private sector. As a result, new jobs are being created in the region and the project has had an impact on eGovernment across Germany.

http://www.bremen.de

Category eDemocracy

Winner: Participation Palette – Tampere (Finland) Participation Palette is an innovative, elegant and effective tool for enhancing participatory eDemocracy. It is a good example of how the interactive capacities of the Internet can be exploited to create new forms of citizen-government relations. Participation Palette creates an integrated environment for eDemocracy containing many interrelated applications that facilitate information, interaction and transaction processing. Most important, Participation Palette is e-inclusive and has sought to provide all citizens with access to the Internet. It is a simple but powerful tool that reflects the commitment of Tampere to the idea of *eCitizenship for All*.

http://www.tampere.fi/

Special Mention: Torino Facile (Easy Turin) – Turin (Italy)
Torino Facile offers individuals the right to access public services in the most effective way and to actively participate in local public decision-making processes - an important role of citizenship. It is a comprehensive local project with ambitious goals that translates many important ideas of participatory eDemocracy into practice. Torino Facile is a strategic approach to the work of building citizen-centred local eGovernment. It is a project in which sustainability and user-orientation are given high priority and, deservedly, contributes to the City of Turin's reputation as one of the most innovative and active European cities as far as promotion of local eDemocracy is concerned.

http://www.comune.torino.it/

Finalist: Open Espoo – Espoo (Finland)

The transition from traditional democracy to fully participative democracy will undoubtedly start up through a wider use of new technologies by governments. The Open Espoo project offers a user-friendly environment in which residents get involved in for example planning and service development processes. It looks like a video game but behind that, effective use of ICT provides the means for interaction and interactive planning online, real-time knowledge database tools for interaction, like discussion forums, and tools for citizen surveys, mapping, document commentary and information management.

http://www.espoo.fi

Finalist: TOWEB – Turin (Italy)

Adopting citizens and business approaches to developing the municipal portal has effectively met all user needs for information retrieval in a faster and user-friendly way. The Toweb search portal of the city of Turin was conceived on the basis of the paradigm of the events of life and effectively managed to bring the contents and the activities of the Public Administrations much closer to users' lives.

http://www.comune.torino.it/

Some definitions

eGovernment is seen as the spectrum of digital services that can lead to local public administrations upgrading the number, quality, speed and effectiveness of its products and services. It is the marriage of digital technology and public administration in the servicing of citizen needs. This is essentially a top-down process.

eCitizenship is seen as the spectrum of digital services that can lead to the citizen personally playing a more active role in democratic and government processes whereby the effectiveness of these administrative processes is upgraded and the processes extended, improved and speeded up. This is essentially a bottom-up process.

The **Knowledge based city** is a city in which the local public administration (together with private interests) is actively experimenting with, developing, using, and advancing e-technology in the service of city operation. The knowledge based city is an integral and key part of eGovernment that will serve to bring the benefits of eGovernment to the whole community.

e-Services are those services which are fully or partly available by e-mail or Internet or other digital channels of communication. Many cities are now adapting their services such that they become more easily distributable by electronic means.

Re-engineering local public administration is seen as the development of e-service-rendering processes to citizens and business while leveraging the cost-benefit ratio and improving the quality of all services.

eLearning and digital inclusion is focused on the digital literacy of citizens. The challenge is to have every European citizen digitally literate and able to benefit from the gains of the Information Society.

eSecurity is focused on securing personal identification and information by ensuring transparency in administrative processes, and ensuring integrity and confidentiality of information processes.

eDemocracy and community building are to improve citizen's participation in governmental matters, providing them with government information, services and decision-making procedures. It helps also to strengthen local social economies.

Contributors to this report

Sincere words of thanks and compliment are due the people of the TeleCities organisation, member cities and Deloitte, named and unnamed, who contributed their skills and efforts to the creation of this report. It will surely be the first in a line of increasingly useful guides to eGovernment and eCitizenship. Thank you.

TeleCities

Anna Lisa Boni	– TeleCities Co-ordination Office Brussels
Nora Bousdira	– Barcelona
Marten Buschman	– The Hague
Albert Deistler	– Cologne
Ingrid Götzl	– Vienna
Tuomo Karakorpi	– Helsinki
Suzanne Liljegren	– Stockholm
Alasdair Mangham	– London
Stéphanie Mittelham	– TeleCities Co-ordination Office Brussels
Jeanette Viale	– Naestved

Deloitte

Michiel van den Berg	– The Hague
John Binns	– London
Frans De Braekeleer	– Diegem
Richard Drewes (survey leader)	– Amersfoort
Jens Hornemann	– Copenhagen
Julie Mercer	– London
John Poot	– The Hague
Hans-Peter van Riemsdijk	– Amersfoort
Frank Wilson	– Manchester
Peter Zimmermann	– The Hague

Cover photo taken by: Europe's weather satellite MSG-1

TeleCities

Eurocities
Square de Meeûs 18
1050 BRUSSELS
Belgium
T: +32 2 552 0868
F: +32 2 552 0889
TeleCities@eurocities.be
www.TeleCities.org

TeleCities Co-ordination Office
Stéphanie Mittelham
Network Support Officer
T: +32 2 552 0868
s.mittelham@eurocities.be

Deloitte

Deloitte
Admiraliteitskade 50
3063 ED ROTTERDAM
The Netherlands
T: +31 10 2721000
F: + 31 10 2721120
www.deloitte.nl

Deloitte contact
Richard Drewes
Partner
T: +31 33 4792792
rdrewes@deloitte.nl

A member firm of
Deloitte Touche Tohmatsu

TeleCities TeleCities is the major European network of cities committed to leadership in the Information and Knowledge Society. Established in 1993 in the framework of Eurocities, TeleCities is open to democratically elected city governments as well as to business and scientific partners. TeleCities provides a platform of over 100 local authorities from 20 different European countries, sharing experience and developing practical solutions achieving an Inclusive Information and Knowledge Society, both at European and local level.

Deloitte is an organisation of member firms devoted to excellence in providing professional services and advice. It is focused on client service through a global strategy executed locally in nearly 150 countries. With access to the deep intellectual capital of 120,000 people worldwide, Deloitte's member firms (including their affiliates) deliver services in four professional areas: audit, tax, consulting, and financial advisory services. Deloitte serves over one-half of the world's largest companies, as well as large national enterprises, public institutions, and successful, fast-growing global growth companies. Within the EMEA region, Deloitte's national establishments participate in the Public Sector Group Europe MiddleEast Africa, which is part of Deloitte's Global Public Sector Industry Group.