Reports on current activities

eGovernment in Europe: The State of Affairs*



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Abstract

This article outlines the state of affairs in *e*Government in Europe in the light of a study¹ conducted within the framework of the *e*Europe Awards Programme², which is managed by the author. Point of departure are the results of the *e*Europe Awards for *e*Government - 2003 which are indicative of what could be regarded today as the state of affairs in *e*Government in Europe. Discussions of good practice in the first part of this article are based on the 357 submitted cases, which show a pattern of replacing rigid administration with reactive, responsive and flexible structures relying on *e*Government. The cases reveal the magnitude of creativity and innovation at work in implementing *e*Government across Europe, thus demonstrating that such a process may well indeed underlie far-reaching changes in governance in Europe.

The second part of the article analyses from a more general perspective what could be described as the vision versus the reality of *e*Government: The information society has coincided with unprecedented efforts to improve administrative procedures and organisation, allowing true citizen-centric, cooperative, seamless and polycentric modern governance. Consequently, the socio-technical and institutional transformations will go far beyond serving citizens and the economy by merely offering online services. Strategies for *e*Government can aim at modernising government in an unprecedented way. However, any such strategy can only be achieved on the basis of a thoroughly reasoned vision. A truly new architecture of service management and delivery is about to emerge, which is built on separating customer-centred front offices from back offices and on seamless connections between organisations. Moreover, fully-fledged *e*Government will not just reshape administrations but also civil society and the public sphere at large.

The article concludes by highlighting some of the major challenges ahead beyond the framework and actions planned within the eEurope Initiative.

More information on the *e*Europe Awards Programme and the original report on the state of affairs of *e*Government in Europe at www.e-europeawards.org.

A Turning Point

The results of the eEurope Awards for eGovernment -2003 appear to confirm that *e*Government has reached a turning point in Europe: The question is no longer simply whether to be online or not. Data-sharing and back office integration will yield substantial benefits. eGovernment is considered a key enabler for citizencentric, cooperative, "seamless" and polycentric modern government. However, in order to truly become a meaningful agent of modernisation for public service delivery and modern governance, the current technology bias must be replaced by a focus on socio-cultural transformations. The major issues are not technical ones, but concern human resources, i.e. (re-)training of staff, the legal framework, and changes in approaches to management, the content of tasks and practices. At the European eGovernment Conference 2003 in Como³, Italy, European Commissioner Erkki Liikanen and Italian Minister Lucio Stanca stressed eGovernment's crucial role in European competitiveness⁴. Investment in the reorganisation of the public sector and in the skills of its employees will ultimately pay off for citizens, businesses and governments alike. The socio-technical and institutional transformations which future eGovernment solutions will both enable and entail go far beyond serving citizens and the economy by merely offering

online services. Fully-fledged *e*Government will not just reshape administrations but also civil society and the public sphere at large.

The purpose of this article is to give a picture of the state of affairs in *e*Government in Europe as presented in the *e*Europe Awards for *e*Government – 2003. Based on this experience, it further attempts to analyse the vision and the reality of *e*Government from a more holistic perspective. Looking beyond the actions proposed by the *e*Europe Initiative the aim is to help find a better understanding of what government will look like in the future and to identify some of the major issues at stake and challenges ahead. The article is based on a study conducted by the author within the framework of the *e*Europe Awards Programme⁵.

The State of Affairs of *e*Government in Europe

1. Background

Discussions of good practice cases in the following section are based on the the *e*Europe Awards for *e*Government – 2003.⁶ The overall objective of the *e*Europe Awards Programme is to facilitate the exchange of views, experiences and good practices among European countries within the framework of the *e*Europe Action Plan 2005.⁷ 357 applications were received in

response to the call for applications. This figure represents an increase of 27% on the 282 applications submitted for the 2001 *e*Government label.⁸ 29 of the 32 eligible countries (EU Member States, candidate countries and EFTA countries) participated in the competition.

Cases were submitted under three themes with a different focus. Breaking down the figures in relation to the themes, a predominant concern appears to be the provision of "a better life for European citizens" (Theme

2), the category under which more than 50% of the applications were received (see also Annex).

For the first time, part of an evaluation within the framework of an EU project was conducted electronically via the *e*Europe Awards web application.

Three prize winners and five honourable mentions were chosen by an independent jury. 65 best practices were invited to exhibit at the European *e*Government Conference 2003 in Como, Italy: 9

Award Winner 1: The role of eGovernment for European competitiveness			
<i>Title</i> Bremen Online Services	Description Integrated portal for <i>e</i> Government transactions, security and legally binding electronic signatures	<i>Organisation & Place</i> Senator for Finances – Department for New Media and <i>e</i> -Government	<i>Country</i> Germany
The other short-listed can	didates:		
The Virtual	eServices for traders, citizens, students,	Swedish Customs	Sweden
Customs Office	press and media		
ETHICS	Electronic Tender Handling Information and Communications System	National Procurement Denmark	Denmark
CAT365	Citizens' portal for job search, studying and training + project AOC, a new model of relationship between the Catalan administrations and their citizens and companies	Consorci Administració Oberta de Catalunya	Spain
Integrated Customs Duty and Tax System	Extensive functionality supporting all customs procedures and documents	Ministry of Science and Information Society	Poland
	Award Winner 2 A better life for Europed		

<i>Title</i> HELP	<i>Description</i> Online guide to authorities, offices and institutions	Organisation & Place Federal Chancellery	<i>Country</i> Austria
The other short-listed cand	lidates:		
Finnish Centre for	Earnings-related scheme, individual	Finnish Centre for Pensions	Finland
Pensions	and personalised service and advice		
e-Enabling Life	Introduction of a modern civil	Department of Social and	Ireland
Event Data	registration service	Family Affairs	
e-Vote for the	eDemocracy across the EU	Ministry of Foreign Affairs	Greece
EU YOU Want			
Regional Network of	Regional Network of	CSI Piemonte	Italy
Piedmont Schools	Piedmont Schools		

Award Winner 3:

European, Central and Local Government eCooperation and Public eServices

<i>Title</i> Tax administration <i>e</i> -Services	<i>Description</i> Tax authorities provide electronic certificates	Organisation & Place Agencia Tributaria	<i>Country</i> Spain
The other short-listed can	lidates:		
E-government in Belgian social security	Network of public and private institutions from different government levels	Crossroad Bank for Social Security/ National Office for Social Security	Belgium
Electronic Information System for Civil Registration and Administrative Services	System storing personal data of all Bulgarian citizens and providing access to stored data for government employees and local authorities	Department of Civil Registration and Administrative Services, Ministry of Regional Development and Public Works	Bulgaria
Platform Service-Public Local – public sector data interchange	Unique access point to eGovernment services on regional and local authorities' websites	Caisse des dépôts et Consignations	France
ENTERPRISE	Translating the needs of the enterprise into administrative procedures	WEGO s.r.l.	Italy

Honourable Mentions:				
Title	Description	Organisation & Place	Country	
AMS Swedish National	Well-established integration of a wide	Swedish National Labour	Sweden	
Labour Market Board	set of job-related services	Market Board		
Special Citizens	How to move to fully open and	Department of State	Estonia	
Web Portal	transparent government	Information Systems		
Three Islands	Supporting remote island communities	Argyll and Bute Council	United	
Kingdom				
Partnership 3IP				
'Auto <i>e</i> -Counter'	Example of good inter-agency collaboration	Automobile Club d'Italia	Italy	
Inter-Agency	Messaging service between	Reach Agency	Ireland	
Messaging Service (IAMS)	various agencies			

2. The Themes

The following section will take a closer look at the cases¹⁰ from different perspectives, i.e. by theme for which submitted.

The role of eGovernment in European Competitiveness

The most prevalent service solutions received are those related to company registration, public procurement and corporation tax. A logical argument can be constructed around the development of various support functions for tax services aiming at easing the bureaucratic burden of private sector interaction with public authorities. In addition, they can be seen as income generating and time saving. As the complexity of these services increases, electronic solutions may once again be seen as a practical solution to streamline internal input and output.

Key aspects under this theme are openness and the willingness to share information and experience across Europe and with the wider world. Some of the projects focused on the development of portals, opening up European cities and regions to each other and to society in general. A number of the city portals provided information in a range of languages, supporting and promoting tourism and other economic development activities as well as the free movement of workers in Europe. An excellent example of an integrated portal for *e*Government transactions, security and legally binding electronic signatures is the German case Bremen Online Services, which offers a variety of services and transactions for businesses (and citizens).¹¹

Employment was another issue, and projects in this area focused mainly on the freedom of movement across Europe and on facilitating the process of acquiring work. Some of the projects aimed at serving nationals working abroad. Others, and this was very much the case with Italy and Portugal, had set up tailor-made systems, conforming to local legislative and cultural requirements. Overall, the diversity of approach presents an excellent opportunity for any future projects in this field to cherrypick from proven good practice to suit their particular local requirements.

An important group of projects was those promoting European economic development through support and advice for businesses, enabling access to global markets whilst providing a shop window for local goods to be seen and potentially purchased across the world. Several different models were presented (e.g. MINEFI, France), each detailing local support and advice structures in place to provide maximum information and backup when needed.

Electronic tendering not only speeds up and streamlines tendering and bidding processes, it also enables access for small businesses as well as larger firms and companies. The experience of the United Kingdom with the involvement of its Australian partner in the Leeds Electronic Tendering System is a good example of how technology can overcome distance. The Danish electronic tendering project ETHICS describes a system that has rationalised and fine-tuned the electronic tendering process and provides sound information and guidance on security issues and the trend towards greater transparency in service delivery.

Governments need to collect taxes to enable them to provide the range of services that ensure a comfortable life for all citizens. This is a fundamental and important task for countries currently building their economies and new social orders on the basis of transparency and democracy. The Polish Integrated Customs Duty and Tax System gives an excellent example of the step-bystep, modular approach to putting in place electronic systems that deal not only with day-to-day tax issues but also with border controls and customs revenue. Ireland, with its Revenue On-Line Service project gives us a good model for electronic tax collection which clearly describes the processes adopted to enable secure business transactions. Another excellent example comes from the Turkish Customs Administration, which has realised that in order to compete effectively on the global market they would have to adopt, and adapt to, new electronic systems to keep up with developments in international trade, whilst combating customs fraud and corruption and ensuring public security, efficient human resources planning and good governance in customs.

Sea and air transport are of course both vitally important to moving goods and people around the European and global market place, but within Europe road transport still plays a major role. The Romanian SOMCET-Net project is an excellent example of the use of electronic technology to control, monitor and provide associated services to the transport industry in order to ensure the secure and timely delivery of goods.

European competitiveness is enhanced by a range of

different factors across Europe. Key factors for all European regions are effective land management and a healthy environment. Cities and towns are becoming more densely built and populated, and this has to be controlled to maintain a sound ecological and social balance in society. Terrain, weather and natural geophysical features need to be taken into account in this process. The Digital Cartography – South Tyrol project in Italy is a good example of how digital cartography, based on GIS and interactive maps, can ensure sound

planning programmes whilst keeping a watchful eye on natural occurrences such as earthquakes. These vital services provide information not only to planners and administrators but also to citizens, thus enabling them to make sound choices in their daily lives.

It is well recognised that *e*Government will only function and be functional if all citizens have access to the information and range of services available.

In conclusion, it can be said that most of the projects submitted for this theme were clearly innovative in the area of usage of technology. During the evaluation it was observed that some initiatives did not fundamentally address the area of modernisation of government processes. However, there were a number of very good examples of a fusion of the two. There is great value and potential in learning from the models designed to solve issues common to many European cities and regions to enhance European competitiveness. The value of this variety of means-to-ends reflects one of the European key principles of diversity of approach.

A better life for European Citizens

The role of citizens in the democratic process has clearly grown and evolved with the introduction of eGovernment. This is well demonstrated by the range of projects submitted which enable citizen voting and participation in the democratic process. Sheffield City Council in the United Kingdom describes the introduction of eVoting supported by assistance services for those not familiar with the technology. The Swiss Geneva Internet voting application is another good example of citizen eParticipation in referenda, while the Greek Presidency submitted the e-Vote project, which is an innovative and ambitious project enabling citizens to vote on matters directly relating to strategies and policy development in the European Union.

Closely related to eVoting in the democratic process is *e*Debating and the seeking of citizens' opinions, empowering the people through debate and discussion whilst at the same time enhancing the transparency of government. The Danish DanmarksDebatten experience, which enables *e*Debates at both local and national levels of government, includes a portable debating module. This can be used by any organisation wishing to conduct a consultation process and provides a good model and starting point for such future developments in other parts of Europe. It is well recognised that *e*Government will only function and be functional if all citizens have access to the information and range of services available. This means that no barriers can be present to prevent any citizen from participating and accessing information and services. Projects such as those in Spain carried out by the Diputacion Foral de Bizkaia and the APLAWS project in the United Kingdom describe the implementation of web pages that encourage inclusion by enabling access for all. A key theme here is that people matter and

> disabilities need not be a barrier to involvement and advancement. It illustrates the fact that all citizens should be catered for in order to avoid an increasing "digital divide". Austria has set up a multifunctional service portal for citizens (and businesses named HELP¹², which

deals not only with day-to-day information and services but has also introduced special measures to cater for the disabled, businesses and tourists. It involves all levels of administrations in a federal system.

Education and training are of course key requirements if European citizens are to compete in the global market place. The Italian Regional Network of Piedmont Schools is a good model of IST use aimed at making learning fun as well as meaningful, extending it across borders and ensuring that young people have the vital skills to progress to work. A key feature is serial learning and training, thus equipping people for changing economies and world markets. The Hungarian SuliNet for Public Education and HIK University Students is a good example of how education provision at all levels has been revolutionised on the back of eGovernment. Not only has the method of service delivery altered but the content of the educational programmes delivered has also changed in order to meet the needs of today's Europe. The French Handiplace.org project is an excellent model demonstrating a tailor-made system aimed at enabling disabled people to receive training and support whilst at the same time promoting their capabilities to employers. It shows how information technology has made delivery of this service possible on a nation-wide scale, thus improving the lot of this important and vital human resource within our society through greater accessibility and innovative thinking.

Alongside this drive for education, is the vital necessity to financially support students with their studies. The pan-European model that seems to be gaining support is the student loan system. The Icelandic Student Loan Fund project is a good example of how technology is used to administer student loans not only to Icelandic citizens but also to those living or studying abroad and those who have settled in Iceland from elsewhere and therefore are entitled to the service.

With advances in medical care, better nutrition and improved living conditions, today's Europeans have a

longer life expectancy. This means that even greater importance must be placed on pensions and programmes to support senior citizens. Citizens need to be informed and be knowledgeable about their own situation and thus be able to make additional provision when necessary. The Finish Tyoelake.fi example is a good all-round model which demonstrates how information technology can be used to provide a service which gives citizens comprehensive access to information and services relating to all aspects of pension issues.

With populations increasing in age, an even larger

burden is placed on the services that support the health and well-being of citizens. This comes at a time when public services such as nursing and social care are being cut back to bring about reductions in costs. A good example of

how information technology-based systems can help solve this difficult issue comes from the Netherlands in the form of the CAREMORE project whereby health professionals are turned into individual mobile care resources whilst they are provided with continued on-line support from the centre. This means that they can spend more time in the community caring for their patients.

Bringing together people and services right across Europe can be problematic in areas where communities are scattered and where scarce resources do not allow multi-location staffed service points. Here the internet and *e*Government have come into their own. An exciting model from the United Kingdom, the 3 Islands Partnership shows how IST can link even remote islands and enable the organisation and provision of a range of vital services and information to citizens whilst at the same time ensuring local business prosperity by providing the means for communication and access to the market place.

In conclusion it can be said that the aim of the solutions submitted is not only to increase the level of service provision and internal efficiency but also to improve user-friendliness and accessibility, and to bridge the digital divide. The citizen is increasingly the focus of attention when solutions are developed and/or is engaged in policy making and governance through increased access to decision making via *e*Democracy and *e*Debate solutions.

European, central and local government eCooperation

Cooperation is a key issue as European local, regional and national governments often comprise many layers and tiers of different government agencies working in "silos". The CAT365 project in the region of Catalonia provides a good example of this. The introduction of *e*Government and a well-planned modernisation programme to integrate and deliver the range of services available to citizens has changed the face of Catalan local government. The result is a simplified process for citizens and local businesses to access a wide range of information and services available within all tiers of government which are delivered through a unique interface. In addition, changes in legislation now also require the sharing of information on citizens between government agencies and departments, thus lessening the need for citizens to repeatedly provide the same information.

Going one step further and generating integrated back and front office solutions is a practical way to increase efficiency, especially considering that taxation systems across Europe are often considered complex, even unfathomable. *e*Government can deliver the solu-

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tion to this conundrum, as is shown by another Spanish example which has provided a virtual tax office for its citizens and businesses (Tax Information between Public Administrations)¹³. The model demonstrates an excellent

level of cooperation between government tax offices and other public administrations, aimed at making life easier for citizens and businesses. In Sweden, good collaboration has been achieved between the National Tax Board and the Patent and Registration Office enabling national electronic registration of companies as well as payment of VAT and PAYE returns (Company registration and tax statements project).

The reorganisation of social security systems across Europe to provide more open and responsive services to citizens and businesses as well as the government departments that manage the social security systems has required major process re-engineering, including back office integration and the implementation of portals through which new services can be accessed. Examples of good practice in this field are the social security project in Belgium and the *e*SV project in Austria whose measured approach has enabled the implementation of effective and responsive service models.

Crimes such as fraud cause loss of revenue and require human resources to trace and handle them. Electronic systems for fraud detection can increase the detection rate by automatically carrying out checks and controls at vital points in the life cycle of a claim. The Belgian Anti-Fraud Datawarehouse project has developed a model whereby the need for precious resources in terms of both time and personnel has been cut and which has enabled more focused investigations leading to an increased apprehension rate. This example also illustrates a possible solution to tackle issues related to security and trust, a major concern for both front and back office users and for clients.

*e*Procurement has the potential to make large savings in the public sector, but problems arise when systems are not compatible. Sweden, with its Single Face to Industry project has therefore developed a standard for *e*Procurement which can be used by all parties involved in the process and by all levels of government. This example clearly demonstrates the importance of standards to ensure interoperability when implementing *e*Government solutions. Spain organises, via its project "Advertising and Disposing of Seized Property on the Internet", on-line auctions whereby the tax collection department can advertise seized goods and sell them by auction. This means that all citizens nation-wide can participate by making bids for the goods on sale.

Several projects address the issue of access to car registration and ownership details. Italy has developed an interesting solution which enables dialogue and cooperation between the Ministry of Infrastructure and Transport and the Automobile Club Italia two of the key players in Italian motoring. It allows immediate access to as well as the issuing of registration certificates. Projects like this will have a major impact on crime control within nations and across European borders.

Government-private cooperation is closely followed by cooperation at a horizontal level, e.g. within ministries. This may arise as the result of requirements for coordination at national level and, more generally, due to evidence of the benefits perceived from reduced waiting times in service provision and increased access to and quality of services through information sharing and greater integration of services. There are good examples of national programmes in Finland, France and Ireland (Lomake.fi, Platform Service-Public Local and REACH) which enable intergovernmental cooperation supported by a number of different technologies, providing transactional as well as information and advice services.

11.76% (42) of the applications received dealt with pan-European issues in one or more ways. An excellent example is a project in Norway, the Primar Stavanger project, in which a virtual global electronic navigation chart to facilitate shipping has been established. Sweden, with its WILMA project has developed a web-based information system that links migration authorities and can handle a broad range of migration issues. This project could be replicated and implemented throughout Europe. It illustrates the need for, and importance of, cooperation and dialogue at every level and ensures the exchange of valuable information, thus enriching and making life easier for European citizens.

In conclusion, we see that a number of submissions cut across different levels of public administration and across key issues such as fraud, security, improved quality and access to services in general. Specific examples also demonstrate the relevance of (common) standards and effective coordination. Governments at all levels, and increasingly at pan-European level, are joining forces not only to share information and resources but also to move towards seamless government. As illustrated by the examples submitted, various innovative and efficient approaches are taken for the benefit of all users, i.e. citizens, business and public sector employees in both front and back offices across Europe.

3. Lessons learned

Submitted cases show a general pattern of replacing rigid administration with reactive, responsive and flexible structures relying on *e*Government. The following can concluded:

- Overall, the picture painted by the 357 cases submitted shows a society undergoing revolution and evolution in basic government structures, cutting through the traditional red tape and bureaucracy. Modernisation and good governance seem to be the keywords. Different communities have adopted varying responses to these phenomena according to their geographic and socio-political contexts.
- Clearly there is a trend to remove command and control from the top and replace it with peoplecentred, responsive and flexible structures reacting to the real needs of society. A pan-European transformation is taking place from the traditional authority structures of a state-centred society, to a more flexible, market-responsive open society.
- The projects themselves reveal vast differences in government competencies across Europe, as well as a range of population trends and cultures for which the implementation of *e*Government needs different and sometimes highly individualised solutions.
- It seems clear that the above factor has produced some excellent examples of change management techniques to ensure a smooth transition not only to a technological base, but also to a modern, more flexible approach of people-centred government.
- Collaboration between the private sector and various levels of government is increasing, as is cooperation among different levels of administration to pave the way for integrated *e*Government solutions.
- Key issues dealt with include increased efficiency and productivity, the needs of vulnerable groups, skills and the use of common standards.
- There is growing interest in cross-border and pan-European cooperation and service provision. Many of the projects were delivered in multiple languages, sometimes particularly targeting tourists and visitors, sometimes reflecting the multilingual aspects of cities and regions and sometimes reflecting the trend towards mobility in Europe.
- A high percentage of projects were submitted from Central and Eastern Europe, demonstrating sound and well thought-out design and implementation plans, and an overwhelming ability to change the status quo to enable the transformation to modernisation. In many cases, new laws have been enacted to make these changes possible.

Reality and Vision

Following up on the conclusions above, an attempt is now made to further analyse the reality and vision of *e*Government from a more holistic perspective.

1. Good Governance is the goal, eGovernment the means

The cases submitted reveal the magnitude of creativity and innovation at work in implementing *e*Government across Europe, thus demonstrating that such a process may well indeed underlie far-reaching changes in governance in Europe.

As a point of departure, the achievements of good

governance within the context of public sector modernisation will be explored. In our view, they can be descriebed with four postulates:

- *e*Government is the key to good governance in the information society
- *e*Government is not viable without a vision
- *e*Government does not just involve the introduction of new technology but also implies a change of culture
- *e*Government is not just a way of service delivery but a way of life.

The key to good governance

The information society is one of the global trends fundamentally changing the way of governing. Gone are the tranquil days when governmental institutions ruled a given population on a given territory in a relatively stable top-down way; now a modern citizencentred, cooperative, seamless, polycentric way of governance is evolving. The European Union is an example of the way current socio-economic trends of globalisation "from above" and the strengthening of civil society "from below" are bringing about changes that will lead to institutional reforms. All in all, when the concept of *e*Government emerged, European societies were already actively looking for new and innovative forms of public governance.

A broad scope

A key characteristic of *e*Government is that it is not restricted to the use of new information and communication technologies by public institutions:

- *e*Government is different from (but builds on) the administrative reform policies inspired by New Public Management (NPM) that have been implemented throughout the EU over the last twenty years
- *e*Government aims at the fundamental transformation of the production processes in which public services are generated and delivered
- *e*Government is thereby transforming the entire range of relationships of public bodies: G2C (Governmentto-Citizens), G2B (Government-to-Business) and G2G (Government-to-Government)
- *e*Government has a great potential to improve the performance of public institutions and build a virtual and joined-up administration.

A change of culture

Transforming culture is a key dimension of *e*Government. It is well known that existing institutions of social and political life exert a strong influence on the behaviour and attitudes both of the general public and of the civil service. "The way we do things here" can never be changed easily through technical re-engineering. The institutional setting influences the nature of innovation in government and it determines its pace and selectivity. *e*Government programmes must therefore develop strategies and change management processes that focus on cultural issues and closely associate the stakeholders (in particular public employees) as full partners of the change process.

A way of life

Modern governance is not just about delivering services. The notion includes democratic and cooperative policy formulation; citizen and civil society involvement; transparent and participative implementation of policies as well as continuous independent evaluation of their results; and finally accountability of public decision makers so as to improve policy making in the future. Though these aspects are still *terra incognita* for the vast majority of *e*Solution providers, they are at the very heart of the future developments of *e*Government.

To summarise, though there will be considerable change in the future, the outcome will be favourable and will bear the marks of good governance such as democratisation, coherence, effectiveness, transparency and accountability. However, there is no doubt that all these developments create a compelling need for developing visions. Despite the fact that the objectives and benchmarks formulated in this context have simply concentrated on putting public services online¹⁴, *e*Government has far more potential for innovative change.

2. A matter for the people

It appears from the cases submitted that there is a trend in governments across Europe to remove command and control from the top and replace it with people-centred, responsive and flexible structures reacting to the real needs of society. The following section deals with the human and knowledge-related aspects of *e*Government while focusing on the benefits for stakeholders as well as knowledge management aspects. The starting point for considerations is the fact that despite sizeable investment, *e*Government services only experience low takeup. Public *e*Services will not be accepted unless they become less bureaucratic, thus enabling citizens and businesses to identify the advantages for themselves.

Benefits for the stakeholders

A thorough consideration of service delivery arrangements is required, and specifications must be drawn up with great care. Therefore public administration must:

- ensure that the needs of more specific target groups are addressed
- provide a multi-channel access mix
- gradually create a single-window access for all services regardless of government level and organisational unit
- provide the required level of security
- make reliability and usability a prime concern.

Multi-channel administration

Some people will access governmental agencies via the internet to request information or initiate a transaction, while others will do so by telephone, or via the front office or a call centre. Others may wish to deal with an employee in a service shop located nearby. Furthermore, one of the key challenges is to design *e*Government projects according to the identified target users. In addition, users will always need a certain degree of help as well as explanations depending on their individual situation.

Features assisting the user

Software designers have to consider the entire interaction process that accompanies any service delivery and provide assisting features. They have to:

- give citizens and enterprises advance information at various stages and in various depths
- help, if necessary, with the filling in of forms etc.
- translate everyday language into legal and administrative jargon or vice-versa
- match the demand with jurisdictional structures
- route the citizen's demand to the relevant back office (which may also be a completely automated process)
- keep track of the processes.

Social inclusion

This is a must in order to provide better access to government information. In Europe a number of initiatives offering free internet access on public premises are underway. This is already the case in some French post offices, Portuguese parish churches, and Austrian tobacconists, etc. Special promotions concentrate on individual target groups: rural and traditionally disadvantaged communities, the young in disadvantaged districts, ethnic minorities and disabled persons.

Managing knowledge, not just information

The government has to keep pace with the knowledge society. Human knowledge and action, supported by adequate IST, is the essence of good governance. Administrations can be described as intelligence organisations and officials are the perfect example of knowledge workers: decision making is a public official's daily routine, and for any agency its particular domain knowledge is a major asset. Ultimately, a better management of knowledge will lead to "smart government".

3. The nuts and bolts of eGovernment

The projects reveal vast differences in government competencies and cultures across Europe for which the implementation of *e*Government needs different and sometimes highly individualised solutions. However, drawing on the experience of various *e*Government projects, certain critical success factors are being revealed:

- the role of advanced technology within the entire scope of objectives
- adequate funding and public-private partnerships
- strategic frameworks based on cost-benefit analysis
- a supportive legal and regulatory environment
- change management and the ability to deal with implementation problems.

Advanced technology

The role of advanced technology requires special consideration. Advanced technologies have definitely made it easier to construct systems as they offer prefabricated building blocks, but their assembly still requires technical expertise. Ample domain knowledge has to be combined with a good understanding of the opportunities that technology offers. As a consequence, despite progress in technology, it still takes considerable effort to build an individual *e*Government system.

Funding – a key factor

*e*Government programmes are expensive and their financial returns have so far been limited. Funding such projects is therefore a demanding task requiring innovative solutions. Public-private partnerships offer many opportunities for funding as well as for the collaborative development of *e*Solutions. In addition, pooling available resources is an important method for allocating funds. Such resource pools could in fact serve the dual purpose of using limited resources efficiently and creating synergies between different *e*Solutions. A practical solution could be a network for disseminating information not only on current and future eProjects but also on funding opportunities.

The need for a framework

*e*Government is now moving from an era where everything seemed feasible to an era of prioritised development, where cost-benefit analysis plays a major role. Thus a proper strategic framework must be established together with a well-defined and realistic set of goals and criteria. In this way a realistic assessment of investment and payoffs, also with a long-term perspective, can be made.

Assessing benefits

Qualitative criteria play an important role in the assessment of benefits, and are therefore highlighted below:

- the range of access channels, i.e. traditional and new ways of accessing services
- the variety of services supplied or offered
- a reduction in actual and subjectively perceived waiting times for users
- better accountability, increased openness, transparency and accessibility of services
- improved quality of life for specific or vulnerable user groups (including the disabled, the elderly, the unemployed, minority groups, low-income households, the young, the rural population etc.).

Good design

The public sector with its organisations at national, regional and local level is a complex socio-technical system. Introducing *e*Government solutions into this environment requires holistic development methodologies and tools making good design a vital issue. Several criteria such as security and usability are key to a solid engineering approach.

Mere transposition is likely to fail

Even though examples of good practice are very helpful in the establishment of new structures, copying successful projects is no substitute for designing individual systems. The feasibility of transference has to be considered in each individual case, as even small differences in contexts may exert essential influence on the design. A caveat: reports tend to hide weak points in the history of a project. An outsider can rarely gain insight into the decisive factors that made a certain application a success (or a failure).

An appropriate legal and regulatory framework

A key prerequisite for the creation of a supportive environment is the appropriate legal and regulatory framework. The latter is an instrument which – like technology – should serve society as a tool to expedite the transition to a knowledge-driven economy, providing clear and stable rules and improving certainty for investors. However, existing frameworks reflect the constraints of a paper-based mode of working and communicating, and should therefore be adapted so as to enable administrative procedures to be carried out electronically.

Change management

Change management techniques have to ensure a smooth transition to *e*Government. For this reason, it is necessary to introduce change management at the political level where strategic thinking and a drive for creating infrastructures are needed. At the managerial level, best practice evaluations and guidelines derived from groundbreaking projects are critical success factors. In addition, exchanges of experience and openness with regard to lessons learned are essential for successful change management.

Transforming administrative culture

The institutional setting influences the nature of innovation in government and determines its pace and selectivity. One must therefore focus on cultural issues and involve public employees as full partners in the change process. For staff members a qualification initiative is needed.

4. Integrated eGovernment: A political r-e-volution?

Integrated *e*Government is no longer confined to bundling services in front offices according to internal administrative logic. Separating front offices from back offices also allows the integration of data, documents and processes, which leads to substantial productivity gains. The vision of integrated *e*Government implies a major reorganisation of the internal machinery of public administration, whereby organisations are restructured and borders are redrawn according to a logic of decentralisation and centralisation. This will be the end of administration as we know it.

The future prospects

Integrated *e*Government opens up perspectives for change for institutions of public governance. This will lead to a rethinking of the institutional structures of government. Even if the fragmented and multi-layered character of present public administration persists, *e*Government will certainly contribute to a progressive overhaul of public administration. In the end this might reduce the ever-increasing complexity of the public sector.

5. Main challenges

A vision beyond short-termism

Politicians and public sector managers have to be convinced to invest in the future, though this might not prove an easy task as all too often political leaders long for visible results (i.e. essentially service delivery) within their periods of office. The implementation of *e*Government concepts requires long-term commitments which largely exceed political mandates. Given that *e*Government requires a level of certainty with regard to future funding, ICT spending should be treated as an investment.

Interdependence – a call for unity

Not only is a breakthrough in cooperation required that would join up the branches and levels of government, but cooperation is also absolutely indispensable between governments at all levels, among users, the industry and academics. Cooperation is a great challenge as it involves the departure from deeply ingrained behavioural structures. A sign of successful *e*Cooperation is the creation of trust and the establishment of common goals and standards.

Cultural and administrative systems

The EU Member States display a great cultural diversity that should be taken into account in the act of decision making; however, this diversity is not always sufficiently acknowledged in practice. The way branches of government work, with regard to policymaking and planning, deciding cases and settling conflicts is often quite different from the mechanisms of the private sector; moreover, they strongly diverge within the European Union.

Interoperability and open standards

Standardisation is a huge task that has to be seen in the wider sense of the term, which includes having interoperable platforms formats for data interchange on the one hand, and establishing a common understanding of administrative concepts and processes on the other. Whilst there are clear similarities between the public and the private domains at the technical level, major differences can be identified at the application level.

Learning from and encouraging each other

A continuous and effective exchange of experience and best practice among the different public authorities of the EU Member States, and more generally among international actors, is of utmost importance. Such benchmarking is a prerequisite for the broad development of the best *e*Government solutions at an affordable cost. In this context, the *e*Europe Awards for *e*Government is a stimulating exercise with great potential.

Conclusions

The cases submitted for the *e*Europe Awards for *e*Government 2003 are indicative of far-reaching changes in governance throughout Europe. Given the developments described above, the concept of eGovernment has to be broadened to embrace the full potential of IST and the entire spectrum of public governance and public sector activities.

We have identified five critical factors for *e*Government implementation: (1) adequate use of tailor-made IST resulting from cooperative processes involving vendors and users; (2) sufficient funding, possibly requiring public-private partnerships; (3) strategic frameworks

based on cost/benefit analyses and demand; (4) a well suited legal and regulatory framework; and (5) adequate change management schemes anticipating psychological resistance and factual obstacles¹⁵. Key elements are service quality, effectiveness and efficiency, whereby a balance has to be found in sharing administrative tasks among the stakeholders.

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Putting people first is a precondition for success: the interests, expectations, fears and dangers which eGovernment solutions give rise to must be addressed proactively. Multi-channel interaction systems with administrations are required. Moreover, eGovernment must not be confined to information processing within the modernisation of administrations, but should be geared towards knowledge management and good governance. Cooperation among stakeholders, including at the European level, is a prerequisite in this process. Naturally, in this process of transformation public service ethics must be revitalised. While government may learn a lot from business management, work organisation and personnel practices, its difference also needs to be recognised. In our study, we consider the main challenges to be the following: (1) planning beyond short term objectives and leadership; (2) developing the capacity to cooperatively mobilise administrations, industry and academic research; (3) understanding the diversity of political and administrative cultures; (4) ensuring interoperability of systems and standards while avoiding brutal standardisation¹⁶; (5) learning from each other within an effective and sustainable framework for the exchange of experience and best practice at all levels of administration across Europe and internationally.¹⁷

Initiatives at the European level, e.g. the actions proposed in the recent Communication of the European Commission¹⁸, the planned EIF¹⁹ and specific EU programmes²⁰, as well as the actions set out in the Como Ministerial Declaration²¹ will certainly contribute to meeting some of the challenges ahead.

It has been widely acknowledged that, without a vision, *e*Government is "mission impossible". *Integrated Government* is a vision which will help *e*Government achieve its full potential for innovative change.²² Comprehensive and fully integrated *e*Government solutions must target user needs and be linked with management and back office reorganisation. To this end, governments

must drop the "e" and build solid, comprehensive and well integrated strategies for reform, based on the prerequisite principles of good governance.

Overall, it appears from the eEurope Awards for eGovernment - 2003 that Europeans take the concept of modernising very seriously. The cases provide us with evidence of the changes that public administrations have

made within their organisations and of the investment being made to allow *e*Government to deliver its full potential. All the projects displayed a diversity of approaches to similar issues enabling an invaluable exchange of learning across the European Union and beyond.

One of the major challenges for the successful implementation of eGovernment, however, lies at the very heart of Europe: namely that its cultural and political diversity calls for new ways of cooperation in implementing integrated eGovernment across all levels of government, including the pan-European level. At the same time, as indicated in the analysis above, it is precisely this diversity that has given rise to a variety of creative and successful approaches to problem solving and to the implementation of eGovernment services and solutions throughout Europe. We should draw on programmes such as the eEurope Awards for eGovernment to top up our knowledge, learn new lessons, identify synergies we can build on and to establish a solid and sustainable platform for the exchange of good practices in order to forge ahead successfully with the implementation of eGovernment and the wider programme of eEurope.

ANNEX1

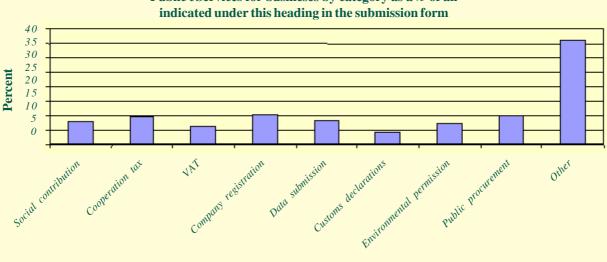
Statistics on submitted cases

29 of the 32 eligible countries responded to the call:



357 Cases were submitted under three themes with a different focus:

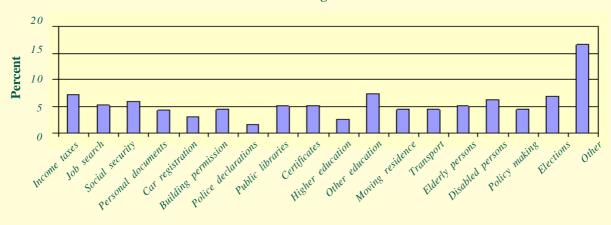




Public eServices for busineses by category as a% of all

"Other Services" followed by company registration (10.34%), public procurement (10.08%) and corporation Note to graph: tax (9.56%).

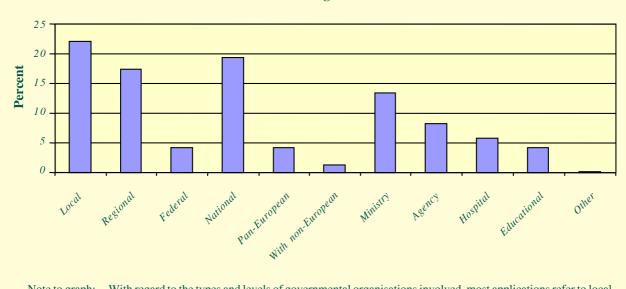
Theme 2: A better life for European Citizens: 51.82%



Public *e*Services for citizens by category as a% of all indicated under this heading in the submission form

Note to graph:
theThe high proportion of cases submitted in the "Other Services" category indicates the scattered nature and
diversity of public services. "Other education" category (7.38%), "Income Taxes" (7.16%) and solutions
to eDemocracy, e.g. "Elections" (6.82%).

Theme 3: European, central and local government eCooperation: 28.29%



Types and levels of government organisations by category as a % of all indicated under this heading in the submission form

Note to graph: With regard to the types and levels of governmental organisations involved, most applications refer to local, followed by national, regional and ministerial organisations. Most forms of cooperation are to be found between governmental institutions and the private sector. 27.68% of the cases referred to government-private cooperation, 27.02 to horizontal and 26.67% to vertical integration.

NOTES

- * This paper has also been published in the International Journal of Communications Law and Policy, Issue 8, Winter 2004, http://www.digital-law.net/IJCLP/8_2004/index.html
- ¹ "eGovernment in Europe: The State of Affairs", Editor: Christine Leitner, Head of the eEurope Project Management Secretariat, EIPA (NL); Authors: Jean-Michel Eymeri, Klaus Lenk, Morten Meyerhoff Nielsen, Roland Traunmüller. The full text of the study is available on http://www.eeuropeawards.org. The report was presented at the European eGovernment Conference 2003 in Como, Italy, on 7 and 8 July, as were the first eEurope Awards for eGovernment. I would like to thank Roland Traunmüller, his daughter Lucy, and Klaus Lenk for their help in preparing a summary version of Part I of the report
- ² The *e*Europe Awards Programme is financed by the European Commission (IST accompanying measure). EIPA hosts the *e*Europe Awards Project Management Secretariat. Four Awards are planned in the period 2003-2005. For details refer to http://www.e-europeawards.org.
- ³ http://europa.eu.int/information_society/egovconf
- ⁴ For an analysis of the results of the conference see Christine Leitner, *e*Government in Europe: The State of Affairs, EIPASCOPE 2003/3 at http://www.eipa.nl.
- ⁵ See FN 1 and 2.
- ⁶ Erkki Liikanen, European Commissioner for Information Society and Enterprise, announced the launch of the *e*Europe Awards for Innovation in *e*Government in 2001.

- ⁷ See http://europa.eu.int/information_society/eeurope
- ⁸ For details see European Commission (2002), eGovernment: Analysis of the Electronic Public Services, Follow-up to the eGovernment Conference, Brussels, November 29-30, 2001.
- For details see www.e-europeawards.org, results section.
- ¹⁰ All cases mentioned are described in the Exhibition Catalogue, available on www.e-europeawards.org.
- ¹¹ 2003 Award Winner.
- ¹² 2003 Award Winner.
- ¹³ 2003 Award Winner.
- ¹⁴ e.g. the *e*Europe Action Plan 2002
- ¹⁵ For details see EIPA Study, chapter 3.
- ¹⁶ Related to data, processes, and technologies
- ¹⁷ See also EIPA study, chapter 5.
- ¹⁸ The role of *e*Government for Europe's Future, COM(2003) 567 final, adopted on 26 September 2003.
- ¹⁹ European Interoperability Framework, see http:// europa.eu.int/information_society/egovconf
- ²⁰ e.g. IDA, IST, eTen, MODINIS, etc.
- ²¹ See http://europa.eu.int/information_society/egovconf
- ²² See also EIPA Study, chapter 4.
- ²³ "Other services" comprise more specific services not categorized in the application form. The relatively high number and scattered nature of the cases submitted under this category is however indicative of the variety and diversity of what is considered and offered as public services in Europe.