eGovernment in Europe:
The State of Affairs

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Introduction

This paper on *e*Government has a twofold objective. The first part (Part I) aims at giving an overview of the vision and reality of *e*Government in order to help decision makers apply principles of good governance to *e*Government, both in the conceptualisation and implementation phases, while bearing a number of crucial issues in mind. The second part (Part II) highlights the state of affairs of *e*Government within the framework of *e*Europe providing a picture of the situation as presented in the 2003 *e*Europe Awards for *e*Government.[1]

This paper will be presented at the *e*Government 2003 Conference in Como, Italy, on 7 and 8 July, 2003.

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[1] A more in-depth analysis of the situation as presented in the 2003 *e*Europe Awards for *e*Government will be given at a later date and published on the *e*Europe Awards web-site (www.e-europeawards.org).

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Acknowledgements

*e*Government in Europe: The State of Affairs

Executive Summary

eGovernment in Europe: The State of Affairs

This report aims at guiding policy and decision makers confronted with the crucial process of implementing *e*Government at all levels. Its aim is to provide a broad and varied overview of both the reality and the vision of *e*Government (Part I), and offer an account of the state of affairs in *e*Government in Europe based on the 2003 *e*Europe Awards for *e*Government (Part II).

Part I elaborates on the achievement of good governance within the context of public sector modernisation. The information society has coincided with unprecedented efforts to improve administrative procedures and organisation, allowing true citizen-centric, cooperative, seamless and polycentric modern governance. Strategies for *e*Government can aim at modernising government in an unprecedented way. 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.

*e*Government is to become a meaningful agent of transformation embedded in the culture of the public sector. Its potential goes far beyond early achievements, enabling qualitative gains in work processes, results and efficiency. If implemented properly, it will help develop and consolidate principles of good governance such as democratization, coherence, effectiveness, transparency and accountability.

In order to achieve these objectives, joint actions by several levels of government and horizontal cooperation among agencies with different traditions are often required.

The socio-technical and institutional transformations which future *e*Government solutions will both enable and entail go far beyond serving citizens and the economy by merely offering online services. Data-sharing and back office integration, which is not visible to the customer, will yield substantial benefits.

Developments need to take account of service quality, effectiveness and efficiency among citizens, businesses and public sector employees. This involves the search for a well-adjusted balance in bearing the burden of administrative tasks among the stakeholders and ensuring a multi-channel interaction system with administrations, i.e. to avoid relying exclusively on the internet. Moreover, it calls for a broader scope of action dealing adequately with interests and expectations as well as with the fears and dangers *e*Government solutions give rise to. Putting people first is a precondition for success. Strategies will promote inclusion, transparency and participation and must include skills development within the public sector so as to address likely fears and to allow successful implementation.

*e*Government solutions must be developed within the broader scope of the knowledge society and good governance and not confine themselves to information processing within the modernisation of administrations. Although the experience acquired in

developing *e*Commerce is valuable, transposition to *e*Government is often irrelevant and may even be counterproductive.

Out of all the factors affecting *e*Government implementation, five have been identified as critical: (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 obstacles.

Moreover, two erroneous approaches are likely to lead *e*Government strategies astray, namely (1) focusing too much and too soon on the technological aspects and (2) concentrating solely on service delivery (unfortunatly, most of the current benchmarking and objectives do unfortunately encourage such a focus).

The challenges to be met include (1) planning development beyond short-term objectives (often determined by the duration of political mandates); (2) developing the capacity to cooperatively mobilise administrations, industry and academic research; (3) understanding the magnitude of the diversity of political and administrative cultures; (4) ensuring interoperability of systems and standards while avoiding brutal standardisation.

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

Part II of this report indicates what could be regarded today as the state of affairs in *e*Government. Discussions of good practice are based on the 357 cases submitted to the 2003 *e*Europe Awards for Innovation for *e*Government, half of which came under Theme 2 – "A Better life for European Citizens". Submitted cases show a pattern of replacing rigid administration with reactive, responsive and flexible structures relying on *e*Government. These 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.

Part I

Reality and Vision

1. What is the good governance that public sector modernisation strives for and how can it be delivered?

*e*Government cannot happen in a vacuum. Its further success is closely linked to fundamental change which is about to transform public governance and administration. This chapter charts the environment in which *e*Government is contributing to transforming Europe into a knowledge-based society and economy.

☞ *e*Government: A key to good governance in the information society

The emergence of *e*Government coincides with an unprecedented challenge to the institutions and procedures through which public governance is delivered.

The era of stable government institutions ruling a given population on a given territory in a "top-down" way has come to an end: current socio-economic trends of globalisation "from above" and the strengthening of civil society "from below", with institutional reforms involving increasing Europeanisation "from above" and increasing regionalisation and decentralisation "from below" have had an impact on the governing processes in Europe.

The notion of governance refers precisely to these changes towards a new style of multi-level, polycentric government and towards a negotiated approach to governing our societies.

At the same time, the ever-dominant "silo" structure of government, with line ministries and functional agencies resulting from intra-bureaucratic conflicts and bargaining, is also increasingly being called into question:

- From a financial perspective, due to the increasing costs of the traditional public service provision of industrial societies, i.e. through large scale bureaucracies; and
- From a societal perspective, with a new concern for a de-bureaucratised and user-centred public service.

*e*Government entered a world in which European societies were already actively looking for new and innovative forms of public governance.

"*e*Government" does not only mean the use of all sorts of new information and communication technologies by public institutions to improve both their relations with their users and their internal functioning. *e*Government means much more: It is different from but builds on the administrative reform policies inspired by New Public Management (NPM) implemented throughout the EU over the past twenty years. However, *e*Government goes even further.

Its aim is to:

- fundamentally transform the production processes in which public services are generated and delivered, thereby transforming the entire range of external relationships of public bodies [G2C (Government-to-Citizens), G2B (Government-to-Business) and G2G (Government-to-Government)].

By using the Information Society Technologies (ISTs) as enablers, but replacing them in an even broader approach in order to modernise public institutions, *e*Government has a great potential:

- To improve the performance of public institutions and make them more responsive;
- To help build a (partly) virtual and (completely) joined-up administration in which the user just has to "knock at the front door" either virtually via a "portal" or physically by going to a "one-stop-shop";
- And thus, while retaining the benefits of the division of labour among public agencies in terms of specialised expertise and professionalism, to develop government-to-government networks and cooperative games with their partners from within the civil society.

The ultimate objective is to achieve a "seamless" but multicentric governance. More precisely, the implementation of the main principles of "good governance" will amount to new ways of managing both policy making and the production of public services. To achieve such a transformation of our inherited modes of governing, *e*Government will provide several major contributions:

Good Governance Principles	eGovernment impact
- Coherence in policy drawing	- Allows for easier policy coordination among ministerial departments, public agencies and layers of government
- Participative democracy in policy making	- Enables the active involvement of all stakeholders in policy making
- Consistency, effectiveness and efficiency in policy implementation: *"The State does what it says"*	- Facilitates cooperative and networked policy implementation in an easier, quicker and cheaper way
- Transparency and Openness of the whole policy process: *"The State informs of what it does"*	- Makes information widely accessible at a very low cost

> To summarise, *e*Government is not only about modernising public administration through IST but it is a key enabler in the building of citizen-centric, cooperative, "seamless", but polycentric, modern governance.

☞ eGovernment: Mission impossible without a vision

Will a new IT-enabled architecture for delivering public services and conducting other public business eventually lead to a new macro-structure of public governance and to a changed distribution of tasks between public agencies?

Harnessing good governance to eGovernment is a demanding objective but indispensable in a situation in which there is an increased need to reform the organisation and the functioning of public institutions.

When we look closely at IST´s potential to transform service delivery and the management of public infrastructure, we can easily imagine that changes in the working processes at an operative level will affect the traditional structure of public organisations.

The production and the distribution of already existing public eServices shows the way: these two dimensions are already in the process of being separated. Whilst production takes place in a multitude of (networked) back offices, often far from the end-user, the distribution of these services may take place either virtually or physically in front offices.

Government in the digital era might well result from a generalisation of this model, in which the role of public officials and the role of citizens is transformed to a large extent.

However, the new "eEnabled" organisation of public governance will obviously exhibit much more variety than simply following a single model. Different organisational schemes will emerge:

- Some domains are already in the process of dematerialization (processes of registering vehicles and property, for instance) and many others will be added, aiming at creating an area of fully online public services;
- In other domains, a strong physical presence will always be required, but IST can provide a real added value in terms of efficiency and effectiveness, for instance as regards public security (defence, police, fire services, emergency management), social and health care, educational and environmental or cultural heritage management, which can all be supported to a certain extent by remote services and virtual technologies.

Whatever the lines of institutional reforms in each given domain, the main issue future governance will be faced with is definitely the management of inter-organisational networks. In this respect, IST will be of crucial importance.

Another aspect of modern governance is its multilevel and polycentric nature. In this respect, it must be mentioned that according to the principle of subsidiarity most EU Member States are traditional federal states or former unitary states that have entered into a process of federalisation, quasi-federalisation or large scale regionalisation and decentralisation – a phenomenon sometimes referred to as "new federalism". In such a socio-politic context, the only way to avoid overlapping, inconsistencies, contradictions and a waste of money in public policies is to promote a "cooperative federalism" or "governance" ensuring a constant coordination between all layers of government. In this respect too, IST appears to be a key to success.

All these developments create a compelling need for developing visions and strategies which so far have been almost absent from the debate on *e*Government. Simple blueprints about what technology can do are a superficial and an insufficient ersatz for such strategies. Ambitious visions need to be adopted.

> The convergence of new forms of polycentric governance with the real-time coordination that future developments in *e*Government will soon bring about has created opportunities for major transformation in the daily governing of our societies.

☞ eGovernment: Not just about technology but a change of culture

To become a meaningful agent of modernisation for public governance and service delivery, eGovernment cannot remain technology-focused.

Throughout human history, science and technology have created new tools and techniques, however, science and technology can only make real progress through their usage in society and the changes in social regulations; as a result of this usage shared beliefs and expectations as well as new daily practices may arise.

ISTs are no different in that respect: the internet, the e-mail, the electronic storage of electronic databases, Public Key Infrastructure (PKI) and encryption are fascinating new technologies but just technologies. In its initial stages, *e*Government has so far mainly been driven by these technologies.

However, *e*Government is much more than that: It implies major socio-economic innovations and politico-administrative institutional changes based on new IST applications and developments.

Transforming culture is thus 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.

> To become a meaningful agent of modernisation for public service delivery and modern governance, *e*Government must abandon its technological bias and focus on socio-cultural transformations.

☞ eGovernment: Not just about service delivery but a way of life

Visions and strategies for eGovernment can concentrate on the internal machinery of public administration or on its relationship with the exterior, or preferably on both.

The majority of EU Member States have tended to focus at first on the output of services provided to the general public, i.e. on electronic public service delivery.

So far the predominant notion of government action has been the provision of "services" to identifiable customers enabling solutions from eCommerce to be "imported" into the public sector. It is however, only to a minor extent that the products of administrative activity act as services where individual "customers" can be identified. More often than not public activities manage general information – building up and maintaining public databases such as civic and land property registers, geographic information systems, official statistics on economic activities etc. This results in the adoption of regulations or the provision of public goods (e.g. in the form of common infrastructure), which then benefit a multitude of impersonal addressees.

This is why major fields of public governance have so far been neglected by eGovernment programmes, namely; homeland security; social security; infrastructure; the environment, etc.

Moreover, 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 eSolution providers, they are at the very heart of the future developments of eGovernment.

Nevertheless, even though eGovernment started with a narrow conception of services, it has a huge potential to contribute to government modernisation. There are however, various aspects that still blunt this potential. For example, that the lesson from NPM has not yet been applied sufficiently, namely the need for organisation according to the customer perspective!

> Despite the fact that the objectives and benchmarks formulated in this context have simply concentrated on that putting public services online eGovernment has far more potential for innovative change.

2. A matter for the people

The following chapter deals with the human and knowlegde related aspects of *e*Government. More concretely it deals with:

*   Benefits for stakeholders;
*   Expectations and concerns of stakeholders, including public sector employees;
*   Knowledge Management aspects.

☞ Balanced benefits for all stakeholders

More attention needs to be given to creating true benefits for stakeholders, namely citizens and enterprises in society at large, and public sector employees in particular.

In many European countries the take-up of *e*Government services has not grown significantly in the past two years despite considerable investment; worse in fact, it has fallen in some cases. On the other hand, online retail sales are growing. Why aren't citizens leaping into online dealings with government? We can assume that people will be prepared to access government services online but only if doing so is quicker, easier and/or cheaper than going through conventional channels.

Thus, the specifications of future service delivery arrangements need to be drawn up with great care. What needs to be done is to:

*   Ensure that the needs of more specific target groups are addressed (e.g. professionals, taxpayers, the elderly);
*   Provide a multi-channel access mix (virtual and physical one-stop-shops, the possibility to use letters, fax etc.);
*   Take into account service complexity (which varies according to the categories of business processes supported);
*   Establish the required level of service integration (eventually single-window access for all services regardless of government level and organisational unit);
*   Provide the required level of security (electronic user identification through secure authentication, with digital certificates and PKI, cancellation and non-repudiability of documents and communications);
*   Implement a data protection policy as well as transparency measures;
*   Make reliability and usability a prime concern (creating user interfaces that match the existing skills and culture, and offer incentives).

*e*Government is more than home administration: Its goal is not to put all transactions online. In fact, where appropriate, the goal should be to avoid transactions according to the "less is more" principle. The challenge is to invent an integrated access structure with a single-window front office. Some people may access this via the internet, in order to

request information or trigger a transaction; others via the telephone, the front office, or a joint call centre serving the public sector as a whole. Others, may wish to deal with an employee in a service shop located nearby.

*e*Government should not mean that citizens have to increasingly deal with IST but rather that the use of IST can make time available for valuable personal contact by supporting routine processes, information searches, etc. In many instances, technology will not always need to be visible to the citizens but will rather support operations in the back office so that services can be more effective and personalised.

Providing assistance is essential: The question is how best to offer this. Users always need a degree of help as well as explanations according to the individual situation. People with special needs must be given even more attention.

One-stop access, important as it may be, is only one aspect of the entire interaction process which accompanies any service delivery. Other functions include:

- Giving citizens and enterprises advance information at various stages and in various depths;
- Helping, if necessary, with the filling in of forms etc.;
- "Translating" the demand for a service (a licence, etc.) from real life – for citizens or enterprises – into legal and administrative jargon;
- Matching the demand with jurisdictional structures (competencies in the legal sense), routing the citizen demand to the relevant back office (which may also be a completely automated process);
- Keeping track of the process, handling "freedom of information" requests and other requirements that demand administrative processing.

With the availability of new internet protocols with broadband service quality, a visionary solution can be imagined: Advanced forms of videoconferencing will soon allow the emergence of the "telepresence" of a human agent based in a back office or front office in an entirely different location. In a "multi-channel administration", multi-channel access involving multifunctional front offices will also bring the advantages of *e*Government to citizens who do not use the internet themselves.

- Many projects already focus on an improved citizen service, but unlike in *e*Commerce, the market test is usually lacking. A "multi-channel administration" will have to replace a one-sided reliance on the internet, which is driven by the attempt to bring as many "users" as possible to the internet.
- This tendency to propagate internet use at all costs is not conducive *per se* to better service. It may even jeopardise the improvements in service quality which currently exists, shifting many burdens to the addressee. In particular, the "translation" effort required when contacting an agency for a service that is not frequently asked for should not be left to the user.

☞ Walking the tightrope between interests, expectations, dangers and fears

eGovernment will undoubtedly contribute to reducing public expenditure while providing better public services, ultimately to the greatest benefit of the user/ taxpayer. However, eGovernment will not take off unless governments behave in a way that earns the trust of citizens, businesses and public employees.

eGovernment aims at reducing administrative costs and providing better quality services. The concept of "better services" implies the co-existence of varying expectations depending on one's perspective and user needs.

One main challenge for governments is to identify the user needs and to design eGovernment projects according to the identified target users. For every eGovernment project, coherence must be seen as the ultimate test: users will neglect governments' efforts in realising eGovernment strategies and visions if the service leads to more bureaucracy and/or less societal, economic and individual benefits.

Openness is of particular importance to improve the confidence and understanding of citizens and businesses in complex institutions and networks. By making public information available online, eGovernment projects contribute to a large extent to these objectives. However, there is a danger and a fear that openness will lead to a more transparent citizen instead of a more transparent government. We must bear in mind that a "smarter government" means a more transparent system of governance in order to strengthen civil society's participation in the democratic process but above all to reconcile citizens with their public administrations by making all transactions and public services easier, better and accessible for all.

The digital divide poses a great threat to reaping the full benefits of eGovernment. OECD statistics show that there are significant differences in access to ICT and the internet. The most disadvantaged tend to have the lowest level of access to the internet, while having the highest level of interaction with government. Member States have started developing eInclusion policies and measures to bridge the gap by:

- installing large numbers of computers with free internet access in public buildings (e.g. libraries in many Member States, tobacco shops in Austria, post offices in France, parish churches in Portugal);
- opening "information technology access centres" and so-called "digital playgrounds" (for the young) in disadvantaged districts, etc.

eGovernment can help build trust by increasingly engaging citizens in decision making. Involving citizens in the policy process through interactive electronic initiatives is probably the future of modern participative democracies. Moreover, well-designed eGovernment projects can result in a more informed and better educated public opinion, sensitive to government proposals. However, it appears rather unlikely that traditional forms of information, consultation and participation will be completely replaced.

eGovernment will only be successful if people in the public sector can be brought "on-board". However, there is widespread concern among public employees that the

increased productivity due to *e*Government will translate into job cuts. Such fears must be addressed and two intertwined lines of action should be implemented everywhere in that respect:

- Employees and their representative unions should be involved in cooperative and change management;
- The basic and specialist skills needed for effective *e*Government must be identified and provided through vocational training for all public employees and managers. Investment in appropriate skills will ultimately pay off. Some Member States have started to set up skill maps (e.g. The UK) as part of their *e*Government strategies. (The upcoming OECD flagship report entitled "The *e*Government Imperative" sets out a list of recommendations that could provide valuable guidance in this respect.)

- *e*Government can help build trust by increasingly engaging citizens in policy making;
- *e*Government must be inclusive, open and transparent: Citizens and businesses will not accept Public *e*Services unless they are less bureaucratic and citizens and businesses see economic, societal, and individual benefits.;
- The fears of public employees need to be addressed: Investment in the appropriate skills of public employees and managers is crucial (skill maps, etc.).

☞ Managing knowledge, not just information

IT is more a vehicle for supporting knowledge-intensive interaction than a tool for process automation. Moreover, public administrations are knowledge-intensive organisations. They employ a particularly high percentage of professionals and specialist staff who command important domains of knowledge, particularly in ministerial departments, the judiciary and in regulatory agencies. Many public organisations are chiefly "intelligence organisations" and officials "knowledge workers par excellence".

Therefore, the prospects for knowledge management in *e*Government are remarkable from the point of demand: nearly all administrative tasks are informational in nature, decision making is the public official's daily bread, and for any agency its particular domain of knowledge is an asset of key importance. Complex decisions are particularly knowledge demanding. One aspect of particular importance is that acting and decision making in the public sector are not a management prerogative; complex decisions are made at the operational level, and this is precisely where most knowledge demands originate.

Management of legal and administrative domain knowledge is a critical factor in governance. There is an obvious temptation to build up knowledge management systems centrally by focusing on central organisational memory. As important as this is – it will not suffice: One has to supplement this with a more user-centred approach to developing knowledge management systems aimed primarily at empowering the individual

decision makers in question (so that they will eventually become their own knowledge managers). From this perspective, central knowledge repositories seem less adequate than knowledge portals in the workplace and IT-supported networks which make it easy to create and sustain knowledge networks at a distance.

Ultimately, a better management of knowledge will lead to forms of "smart government" or evidence-based policy making. Knowledge derived from previous action or gained through policy evaluation will be fed back into policy making in an attempt to improve target policies.

> Government has to keep up with the knowledge society. Human knowledge and action, supported by adequate IST, remains at the heart of good governance.

3. The Nuts and Bolts of eGovernment

Past experience with *e*Government projects as well as the results of benchmarks indicate that a range of factors is very critical for lasting success. This chapter will highlight several of these critical factors:

- The role of advanced technology with regard to the overall objectives of a project;
- Adequate funding and public-private partnerships;
- Strategic frameworks based on cost/benefit assessments;
- A supportive legal and regulatory environment;
- Change management and ability to deal with implementation problems.

☞ How to make good and extensive use of IST

Advanced technologies already provide many building blocks for *e*Government solutions but in order to make full use of them some assembly is required. A large amount of domain knowledge is necessary for developing useful and economically viable applications. These should also envisage the use of technologies which are not yet on the market but can be expected to be available soon.

The technologies applied in *e*Government solutions cannot simply be thrown onto the market. They have to be assembled according to the logic of the problems at stake. Solutions should aim at harnessing technological building blocks to tackle existing problems and plan for innovative administrative action and public institutions. This will only be possible if there is a thorough awarness of needs and an understanding of possible future technological developments.

In many cases, best practice results are characterised by intensive cooperation between vendors and domain specialists, often in the framework of a public-private partnership. The assembly required to integrate the technological building blocks into useful and economically viable solutions has to be carried out in close cooperation with domain specialists who have a good understanding of the technological potential on which they can draw.

New *e*Government solutions should already be envisaged making use of innovative technological perspectives which will mature in years to come. These include platforms for ubiquitous human cooperation as well as mobile multimedia communications based on next generation internet infrastructures. Many new applications appear able to support the work of, for example, field workers in the public sector such as the police, social workers or forest rangers. Efforts should now be stepped up to plan for a situation where this technological infrastructure will be available. Similar observations can be made with regard to software developments in the field of speech recognition, security applications and other areas.

Perhaps we need sci-fi public administrative fiction to envisage such solutions that have not yet been invented. If these solutions correspond to requirements, they will also present many business opportunities to the providers of such solutions. If instead, as is often the case, new technology finds itself looking for applications – "solutions looking for problems" – the benefits, for both service providers and users, will be comparatively meagre.

> Key points to bear in mind:
> * *e*Government technologies should be vision-driven instead of simply presenting ready-made *e*Solutions looking for problems;
> * Knowledge of the administrative domain has to be combined with a good understanding of the opportunities opened up by technology;
> * Cooperation among vendors, solution providers and users is imperative to apply domain knowledge and know-how to the development of *e*Government solutions.

☞ Funding and developing eSolutions in public-private partnerships

Raising the necessary funds for eGovernment projects is often difficult. Innovative solutions such as public-private partnerships may bring some relief.

A lack of funds presents a severe constraint in developing *e*Government solutions in the cooperative way necessary for true benefits to materialise. As long as politicians are not yet fully convinced of the medium and long term benefits which *e*Government can bring to the public sector and to public governance, the willingness to provide funds for these projects will be limited. Shortage of public funds creates additional constraints.

Whether the streamlining of the back office is done for greater efficiency, to improve access or the quality of services, or to achieve more with limited resources, we cannot expect support in implementation if we cannot articulate potential (in the case of methodology) and actual benefits (in the case of benchmarking and cost/benefit analysis). A case in point is The United Kingdom, which has a well-formulated strategy, an organised support structure and significant funding available for IT investment. This will enable the government to achieve substantial growth rates despite many delays on major projects and resistance to organisational change.

So far, *e*Government initiatives have mostly been funded by two sources, i.e. public budgets and money from contractors to be recovered through fees and licenses. Whatever the combination of financing sources, it is important to not only keep in mind the initial vision but to also take a practical and realistic strategic approach to a project. In fact, public-private partnerships would in many instances provide not only an environment for collaborative systems development in the sense described above, but also for raising the necessary funds. An interesting case is Italy, which despite a comparatively low level of public IT investment, has in fact implemented some cutting-edge *e*Government solutions. There is always a need to balance the interests of the private partner, who expects a return on his investment, and the public interest, which may often appear as being very costly. However, if solutions are developed as

recommended above, i.e. by blending technological progress with good domain knowledge, innovation will be the result, which will not only benefit the public partner but also become a commercial success.

Another important method for allocating funds is the pooling of resources, whether vertically or horizontally, between local, regional, national and pan-European organisational levels. Such pools could in fact serve the dual purpose of using limited resources efficiently and creating synergies between different eSolutions. A practical solution could consist in a network for disseminating information not only on current and future eProjects but also on funding opportunities.

> eGovernment programmes are expensive and their financial returns have so far been limited. Funding such projects is therefore a demanding task to which innovative solutions have to be applied. Public-private partnerships offer many opportunities for funding as well as for the collaborative development of eSolutions. In addition, pooling available resources will mobilise synergies.

☞ Comparing apples and pears or ensuring what we want – Strategic framework and benefits

eGovernment is now moving from a "brand new" era where everything seemed feasible, to an era of prioritised development that relies on cost/benefit calculi. However, determining priorities is difficult.

Much has been written about developing strategies with realistic targets, and there is no reason to dwell on things already known such as the need for realistic time schedules and budgets. The most important thing to ensure is that once the initial framework vision has been established in terms of realistic goals and criteria, it is then quantified and qualified in some way. There is no reason to reinvent the wheel just because we are dealing with an eProject. The main issue is to know what we actually want to achieve, and that the demands, costs, impact and benefits are clearly identified, defined, monitored and evaluated.

For all projects it is essential to use a proper strategic framework together with a well-defined and realistic set of goals and criteria, so as to ensure that the right objectives are reached in response to real social and economic demands. There are many such frameworks available, one of which is the Common Assessment Framework (CAF). Resulting from cooperation between the EU Ministers responsible for public administration, the framework is designed for use in all areas of the public sector. It is applicable to public organisations and may be used in a wide variety of circumstances such as systematic reform programmes or as a basis for targeting improvement efforts in service organisations. In addition, the civil services of the EU Member States have committed themselves to using this framework and its aims to assess performance in service delivery.

Assessing the benefits of eGovernment projects is a complicated task. Return on investment is just one aspect, albeit a fundamental one. Since it is comparatively easy

to measure, it is often taken as the most important benchmark. Still, this is just one side of the benefits, and one that is relatively easy to quantify. For an accurate estimate of the financial benefits of *e*Government projects there are two very basic and reliable indicators, i.e. savings in time and, mainly human, resources. Other potential benefits, such as access to and quality of services, are by nature rather intangible. The criteria and goals to be assessed in the chosen strategic framework must therefore be set out beforehand. For example, for the quality assessment of an application, the following criteria could be used:

• Number of access channels – i.e. traditional and new ways of accessing services;
• Number of services supplied or offered with the application;
• Reduction in – actual and perceived – waiting time for users;
• Greater accountability, openness, transparency and accessibility to services through the provision of information and access to decision makers and civil servants, etc.;
• 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.

There are many ways to quantify the cost and benefits of an exercise, ranging from the traditional cost/benefit analysis, which quantifies monetary gains, to net present value, shadow and hedonic pricing, to Resource Allocation Methods (RAM) and multi-criteria analysis. What these measures have in common is that they try to measure both direct and indirect costs and gains of a given activity or project. One should be careful not to exclude any valuation method, but to use the most relevant measure on the basis of the goals and criteria set out in the initial methodology and benchmarking exercise.

It is however crucial that the measurement of the benefits of *e*Government should not be limited to a mere cost/benefit analysis in terms of cost savings. By comparing investment in *e*Government with the increase in savings over the next few years, in the case of the United Kingdom it appears that savings will not outweigh costs until the financial year 2012. The *e*Government Cost Savings Report has forecast that the savings from the online provision of government services by UK central and local administrations will be around EUR 408 million for the financial year 2005/06 against expenditure to the amount of EUR 1.69 billion for the same period.

A proper strategic framework together with a well-defined and realistic set of goals and criteria is a pre-requisite for ensuring that the right objectives are reached in response to real social and economic demands. This will allow a realistic assessment of costs and benefits, without creating illusions about short term payoffs.

☞ **Good design is important for building eGovernment solutions**

*e*Government is strongly shaped and driven by social, cultural and political factors. Good design should not focus on technological factors alone, but should respect and enable both "hard" and "soft" requirements.

The public sector with its organisations at national, regional and local level is a complex socio-technical system. Introducing eGovernment solutions into this environment requires holistic development methodologies and tools. Hence good design becomes a vital issue. There is a need for advanced forms of socio-technical systems to be designed which take due account of the role of human knowledge, labour and decision-making capacity, and which harness technology in usable forms of human-machine interaction. A particularly important role is played by the design criteria: security and usability are top of the list. A sound engineering approach has to encompass these and other issues, translating social, cultural and political requirements into the designing of adequate solutions.

Design commonly focuses on the software part of complex human-machine interaction systems. This may neglect the business logic of a sector, as well as the ways in which people are working. Their routines are often based on tacit knowledge which has to be elicited in order to create systems which are a success in terms of both productivity and usability. A highly relevant topic in this context is human-computer interaction. The design of the interface will fundamentally determine usability.

The need to put much effort into the careful design of eGovernment systems is often downplayed, the argument being that good practices from other countries or other organisations can simply be copied. Such an assumption dramatically underestimates the variety of cultural, social and political backgrounds. Quite often, the decisive factors which make a certain application a success in one country are not elucidated and communicated in benchmarking reports.

> Do not apply technology in a uniform way; adequate design is indispensable. The mere transposition of good practice is likely to fail for lack of consideration with regard to differences in contexts.

☞ Creating a supportive environment for modernisation

Ensuring the appropriate legal and regulatory framework is a key prerequisite for the swift and lasting deployment of eGovernment solutions.

The legal framework is an instrument which – like technology – should serve society as a tool to speed up the transition to a knowledge-driven economy, providing clear and stable rules and improving certainty for investors.

To a large extent, this framework still reflects the constraints of a paper-based mode of working and communicating. Legal rules need to be urgently adapted so as to enable administrative procedures to be carried out electronically. However, in many respects new rules are required. For instance, where it concerns new problems in dealing with an overload of information and in deciding on how to strike a balance between secrecy and openness, new rules and regulatory frameworks have to be developed. Another challenge is posed by mobile services: keeping track of people in space and time with mobile internet access will be much harder than if they used the internet in a stationary way.

In adapting the legal framework to a knowledge-driven economy, it must be borne in mind that legal rules, and especially national constitutional law, embody principles of good governance and guarantees for the respect of human rights. Care must be taken not to jeopardise this "*acquis*". Fascinating as the vision of a "seamless government" may be, it must not loose sight of the basic requirements of the rule of law and of due process. Data protection in the shape it has now taken in the EU is an important facet of guaranteeing appropriate and safe structures for citizens. Without jeopardising the goals of data protection, ways must be found to accommodate this to new institutional settings and to new information flows in order to best serve society.

> An appropriate regulatory framework is necessary if *e*Government is to become a key factor in facilitating the transition to a knowledge-driven economy.

☞ Change management is as difficult here as it is elsewhere

eGovernment projects are no different from any other project. Here, as elsewhere, implementation is the "Achilles heel" of modernisation and reform.

There is a continous temptation to regard new technological solutions as so convincing believing that major implementation problems will not arise. This belief is very dangerous. It is fed by assumptions that implementation difficulties are only related to an immature state of technology, meaning that the next technology generation will wipe them out. Also, it has often led to a disregard for the viewpoint of the future users of a system and the ways in which they will tend to shape the system according to their own preferences.

Again, cooperation between solution providers and domain specialists is crucial when it comes to implementing systems which quite often receive their ultimate shape only through ongoing interaction during the organisational implementation process. During such processes many opportunities arise for properly designing the system. Conversely, many hindrances may only be felt during organisational implementation, which means that ways have to be found to ensure that the system is used properly once it has been introduced.

We have considerable knowledge of critical factors of change management. They include the following:

- Political and administrative leadership;
- Strategic thinking;
- Farsighted allocation of funds for creating infrastructures;
- Avoiding reinventing the wheel in different places;
- Best practices and guidelines derived from landmark projects which have to replace the original, but indiscriminate, experimentation with different approaches;
- Taking account of the cultural context;
- Putting people first;
- Internal and external dissemination of the necessary know-how.

- Action has to be taken to improve the conditions for a successful implementation of *e*Government projects.
- Available knowledge regarding management of change applies here in the same way as it does in any other modernisation project in the public or private sector.

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

In order to provide guidance for investments in eGovernment and its further deployment at a time of change, a vision is needed which links eGovernment and its revolutionary potential for eTransformation to a new form of public governance and its major institutions. There will be many ways in which this eTransformation will take place, and the challenge is to anticipate and – if possible – influence them in accordance with basic values and principles of good governance. The following chapter focuses on the future perspectives of integrated eGovernment and possible ways to meet the challenges of eTransformation.

☞ **What will an eTransformed realm of public governance and public services look like?**

Integrated eGovernment is a vision which will provide guidance to help eGovernment achieve its full potential.

Spelling out a vision which carries us beyond the achievements of the 2003 eEurope Awards is possible. It amounts to abandoning the concern with the most visible achievements, such as portals, and concentrating on the hidden part of the iceberg. In such a vision, several trends which are already visible are joining forces. Eventually, the "e" will become so pervasive that it will be meaningless to mention it any longer. Not only public services to identifiable customers are taken into account, but all situations where security is provided such as public infrastructures built and maintained as well as other common public goods provided in a sustainable way. IST can support all this far beyond what has already been achieved in the field of customer service.

> The eCommerce analogy was important to launch eGovernment but now it has become a straightjacket which prevents one from looking towards future challenges.

☞ **"Seamless Government" and a new service architecture**

Integrated eGovernment will come to the fore when it is feasible and desirable to build a new architecture of "seamless government", consisting no longer of a range of "stove pipe" organisations but of networks connecting "one-stop" front offices to the back offices of service providers.

Starting with the already well-charted field of public services, integrated eGovernment combines two trends which are already very visible:

- a new service architecture relying on a division of labour between front offices and back offices, the two being linked by a platform other refered to as "mid offices";
- a "seamless government" where the boundaries between organisations and their jurisdictions will tend to be increasingly permeable, mainly remaining only when this is functionally required, e.g. for protecting the basic rights of citizens.

In combining these two trends, certain main elements of the future shape of public governance are now becoming visible.

Through separating back offices – where a service or other public good is produced; from the front office – where it is handed over to citizens or enterprises; it is possible to concentrate the production of a public service or good and at the same time bring it closer to its beneficiaries. The two are linked via a platform that enables secure communication and the routing of request, made at front offices, to the back offices in charge.

Front Offices
Not only will front offices be able to mediate between citizens and enterprises on the one hand and back offices on the other, no matter where they are physically located, it will also be possible to tailor front offices to the needs of specific target groups, e.g. the jobless, the elderly, the self-employed etc.

Back Offices
Governments will try to consolidate back offices in order to increase their productivity. Smaller units, especially in local government, will run shared back offices, thus stepping up government-to-government communication by orders of magnitude. Information then flows freely and is widely shared.

Concerning *e*Public services, an architecture which distinguishes front offices from back offices paves the way for a situation which could be likened to a "service retail trade". Before online services entered the stage, we acted as if we had to go to the farm to buy eggs or to the mill to buy flour, instead of considering grocery stores or supermarkets – these times are now over. While internet-enabled online connections with citizens have opened the way for this new situation, it is important to note that online access will not remain the only modern way of delivering Public *e*Services. Physical neighbourhood "service retail shops" can be set up to make services easily available. Assisted service will profit from *e*Government opportunities in the same way as self-service online possibilities. Front offices may materialise as internet portals, as call centres with internal IT support, or as physical one-stop-shops, equally with internal IT support. From these front offices, typically several back offices can be addressed. In the case of a fully-fledged "single-window" access, the back offices of all public administrations and possibly also of non-profit organisations and commercial service providers could be accessed from any front office.

> A new architecture of public service delivery is emerging. Front offices (internet portals, call centres, neighbourhood service shops) come closer to citizens and enterprises, while back offices can be located anywhere. Service production and service delivery are split in location, but linked via networks.

☞ Beyond simple patterns of "life events"

In a first step, back office processes were re-engineered one by one in order to prepare for online service provision. However, back office integration is far more promising both in terms of productivity gains and of realising principles of good governance.

The vision of integrated *e*Government implies a major reorganisation of the internal machinery of public administration, but this reorganisation will not take the form of what we are used to. Organisations will be restructured and borders redrawn according to a logic of decentralisation/centralisation. With information flowing freely, this logic is being replaced by a logic of "virtual" integration and of data sharing, which can take at least three forms. Such a situation, which will materialise in different ways in the various countries, typically involves several types of integration among the various offices:

- Front-office driven integration: This first form of integration consists of pooling data from different back offices in one front office. Here the customer can ask for several services, delivered by different back offices, which correspond to a given life event or the business situation of this customer. The back offices may in this case be unaware of each other;
- Resource-driven integration: The second form of integration is advanced data sharing, where a dependency on common data resources is organised. Back offices use data which are stored either centrally or in a distributed manner. They can draw on the same basic data, e.g. address, place and time of birth of a person, without having to ask for the information separately. Furthermore, integrated systems of document management contribute to this form of integration;
- Process-driven integration: Here, several back office processes are inter-related. An example is a permit which is only delivered by agency A if agency B certifies that the addressee complies for example with environmental regulations or regularly pays social security contributions, etc. The beneficiary will no longer be sent from agency to agency different agencies but will reap the benefits of the process-driven integration, which requires the cooperation of several agencies.

The resource-driven and process-driven integration of back offices has an enormous potential. But this potential will only materialise if there is enough trust in the structures of public governance. The required level of trust in government requires not only a satisfactory level of protection of personal privacy, but also open and transparent government whereby citizens would be given a large freedom of information, in particular the possibility to track their own files and dossiers within public databases. Through sophisticated engineering, which is no longer one-sidedly technology-driven, this has to be made compatible with the pursuit of efficiency, effectiveness and other principles of good governance.

> Integrated *e*Government is no longer confined to bundling services in front offices according to the logic of their recipients. Separating front offices from back offices also makes the integration of data possible, documents and processes such that better service and important productivity gains will follow.

☞ The future prospects

Integrated *e*Government opens up vistas on a changed landscape of institutions of public governance.

Efforts to redesign public services, processes, cooperation and knowledge management are already leading to a rethinking of the institutional structures of government, even though the fragmented and multi-layered character of present public administration, based to some extent on constitutional and political consensus, will never simply disappear. It may subsist, concealed behind access structures which would no longer follow administrative logic but instead concepts of whole person or life event oriented service delivery. Yet, in the long run, concerns with principles of good governance and productivity constraints may increasingly call the traditional institutional structure of the public sphere into question in an unprecedented way. Improved citizen service, better engineered processes, ubiquitous cooperation and knowledge management, taken together, may well lead to a profound restructuring entailing a substantial reduction of the ever-increasing complexity of the public sector.

The distribution of tasks among levels of government and among agencies has evolved over a long period of time. It reflects major socio-political compromises, the structures of policy fields, but also the constraints which paper-based modes of work and the need for physical proximity put on government machinery. The former dimensions will remain, whereas the latter constraints will progressively vanish as *e*Government takes its next steps. New institutional designs will increasingly gain acceptance, but it is not yet clear in which form they will emerge. The first automobiles took the form of a stagecoach, therefore we should not expect entirely new institutions to already be able to make full use of the huge organisational potential that IST has put into our hands. However, it is likely now that notions of administrative jurisdiction and the territoriality of public administration will be redefined in the future.

> *e*Government will certainly contribute to a progressive overhaul of government machinery in aiming at rebuilding public institutions which are able to face the challenges of the future.

☞ Realising the vision of integrated *e*Government

Integrated *e*Government will not materialise without conscious efforts.

Integrated *e*Government will not come about automatically by introducing technical forms of front office integration, such as portals, and back office integration, e.g. enterprise application integration systems. Many structural choices have to be made, according to principles of good governance and other desirable outcomes.

In order to develop integrated *e*Government in a responsible and sustainable way, several challenges are soon to be met:

- Joined-up government will have to be made a reality;
- Competition will have to blend with cooperation, and the non-cooperative games between ministerial departments, public agencies and layers of government must come to an end;
- Networks of institutions which will have to work together to deliver services providing common public goods will have to be managed in new ways. Public management is to evolve into new forms of government network management, where inter-organisational relationships are central;
- An increased level of trust in government will require not only a satisfactory level of protection of personal privacy, but also as open and transparent government whereby citizens are given a large degree of freedom of access to information, in particular the possibility to track their own files and dossiers within public databases. This has to be made compatible with the pursuit of efficiency, effectiveness and other principles of good governance.

> If these challenges are met on time, huge rewards may follow: An *e*Transformed public sphere will contribute not only to a new balance of European, national, regional and local public institutions and structures, but also to the entire public sphere including the economy and civil society.

5. Main challenges

This chapter identifies the main challenges *e*Government is currently facing as well as outlines a number of possible recommendations in order to deal with these challenges.

☞ A vision beyond short-termism

Politicians and public sector managers need to be committed to investing in our future with a long term view.

All too often political leaders long for visible results (i.e. essentially service delivery) within their mandates. However, such considerations of immediate political survival lead to fragmented if not backward processes.

Decision makers will need to gain a thorough understanding of the issues at stake in order to sustain the fast growing political interest in *e*Government and to direct it towards meaningful goals.

Both leadership and the commitment of politicians and public sector managers are crucial to manage change. *e*Government implies a transformation of government. A new approach is required for everything from procurement to the major principles and values of privacy legislation. This transformation cannot be accomplished by the public service alone but requires strong, committed and informed leadership at the political level (OECD Policy Brief, March 2003).

Where appropriate, ICT spending should be treated as an investment, since *e*Government requires a level of certainty with regard to future funding in order to provide sustainability and coherence.

Processes to implement *e*Government require:
- long-term commitments which largely exceed political mandates;
- strong political and administrative leadership;
- certainty of future fundings.

☞ Interdependence – a call for unity

A breakthrough in cooperation is required: not only joining up the branches and levels of government is a must, but also cooperation between governments at all levels, among users, the industry and academics is also necessary.

An idea that has become quite popular is to devolve decision-making and service provision to the lowest administrative level possible, in order to enable a sustainable bottom-up growth and empower people to deliver results. It is the local administration that is closest to the citizen.

Close and continuous contact is necessary among all actors involved so as to ensure that the eGovernment services and solutions developed at regional level (and/or national level) are interoperable with the services developed at local level, and vice versa.

Cooperation is a great challenge since it involves the departure from deeply ingrained behavioural structures. Identification with the goals of the agency or body to which one belongs is often stronger in the public sector than elsewhere.

Without the cooperative efforts of actors from government, users, the industry, science and the consulting professions, eGovernment will flounder. Many obstacles have to be overcome, including many competing goals, a dense grid of regulations, the fragmentation of traditional public sector institutions and many historical legacies.

Our richness in diversity of cultures poses a major challenge to the unity that is required to make eGovernment work effectively and efficiently. The way we think, live and work together varies. Actors are embedded in different structures and have different policies, visions and attitudes. There is a need for a win-win approach enabling us to establish common goals and common standards (e.g. a common service platform). This is not only true for the pan-European level but also for the national, regional and local administrative systems. During the last few years, encouraging signs of enhanced cooperation have been observed. Interorganisational cooperation, which is of vital importance for innovation alliances, has considerably increased.

The best way to cope with these challenges is to build multinational, multidisciplinary networks of cooperation. eCooperation agreements (outlining the different responsibilities and tasks of the respective governments) and strategies among the different levels of government are a first step and equally important as their actual and practical implementation. Additionally, the framing of research and development programmes on eGovernment at national, European and international level deserves high priority. Through a dense research network, general expertise can be fostered, reference models and practical standards proposed, and the diffusion of innovations accelerated.

- Pre-requisites for successful eCooperation is to subscribe fully to a win-win approach, establishing common goals and common standards.
- Another key to success is the skills of the partners in the field, i.e. regional and provincial levels, to stimulate, set agendas and directions, mediate and negotiate effectively with all stakeholders involved.

☞ Systems, interoperability and open standards

Differences in cultural/administrative systems are important and not always sufficiently acknowledged.

The ways in which branches of government work, such as in policy-making and planning, in deciding cases and in settling conflicts, are often quite different from what can be found in the private sector and show a diversity in the European Union that is seldom acknowledged. Moreover, vendors are likely to downplay this aspect in order to sell more or less standardised products to diverse entities. But the governmental systems that have evolved on the European continent have a very complex structure. The French, the German and also the former Austro-Hungarian model of public administration are still very influential, and they are quite different from British or American governmental traditions. Many EU-financed European pilot projects have stumbled over these differences. The management of transnational projects is a very demanding task which requires a good understanding of the respective political and administrative cultures.

> To find a common understanding, engineers and consultants on the one hand have to learn about different administrative cultures, political and administrative decision makers on the other about technologies.

Standardisation is a huge task that has not yet been completed. Moreover, it has to involve many stakeholders such as public agencies, the software industry and private companies as well as national and international institutions.

Whilst similarities between the public and the private domains can be seen particularly at the technical level, at the application level the public sector is much more complex. All in all, standardisation in the wider sense of the term includes several aspects: establishing a common understanding of processes while building on widespread administrative concepts, ensuring interoperable platforms, having a workable administrative domain ontology; and defining formats for data interchange. Standardisation is an enormous task, but all partners involved will gain from its achievement.

The core of the problem is not to be found at the technical level but rather at the conceptual level, as the semantics of legal/administrative concepts and rules have to be "captured" in the data. The characteristic of the web is that data which was formerly used locally is now being used globally. Data must reflect its specific legal/administrative context. A matter (e.g. civil marriage) dealt with online via a one-stop-shop service involves a great deal of automatic data interchange.

A life event such as a civil marriage involves many transactions and a number of data repositories. These may be spread over many locations, coming under the competence of various agencies and based on several different systems. Before the event takes place, several documents located in different agencies have to be checked; then, many updates have to be made (change of name, civil status, and common domicile) in documents that are kept at various locations. Interstate eGovernment makes the situation even more complicated: imagine the case of two persons with different

citizenships marrying in a third country. To ensure a smooth running of the system, interchange should be automatic. Such a process will only be possible if the systems used consider both semantics and rules.

On closer inspection, standards are not a mere technical problem but also a matter of accountability and privacy. In a way, releasing data is not unlike opening Pandora's box. Due to its sensitive nature, when data kept in the custody of an agency is released, it has to be done in the framework of a reliable and trustworthy system whereby misuse can be prevented. In other words, standards are a core issue in many respects. In fact, the initiatives and projects of the European Union have spurred much of discussion on this topic and we can be proud of the progress already made; nevertheless, there is scope for more.

> Standardisation has to be seen in the wider sense of the term: ensuring interoperable platforms and defining formats for data interchange on the one hand, and establishing a common understanding of administrative concepts and processes on the other.

☞ Learning from and encouraging each other

A continuous and effective exchange of experience and best practices among the different public authorities of the Member States, and more generally among international actors, is of the utmost importance. Such benchmarking is a prerequisite for the broad development of the best *e*Government solutions at affordable cost.

In this context, the *e*Europe Awards for *e*Government is a stimulating exercise with great potential (for preliminary results of the year 2003 exercise, see Part II). However, continuity is a key factor in the process of exchanging good practices. It is indispensable to establish a framework for exchanging best practices and experience so as to avoid a mere one-off "copying" of an awarded application which might not be suitable in a given socio-cultural context.

> - A framework for the exchange of best practices and experience at European and international level should be established in order to foster strong commitment and continuity in the practical implementation of *e*Government.
> - An exchange of good practice is also needed with regard to good practices of change management. It is important in this context that effective leadership is provided and that all future users and stakeholders are prepared and qualified to use *e*Government solutions.

Part II

*e*Government – The State of Affairs

6. The 2003 eEurope Awards for eGovernment: "Good practice in personalised services and increased productivity"

Background

The *e*Europe Awards for *e*Government are based on the experience and are along the lines of the *e*Government label awarded to 60 administrations at the 2001 Ministerial *e*Government Conference "From Policy to Practice" held on 29-30 November 2001, which was jointly organised by the Belgian Presidency and the European Commission.[1] Erkki Liikanen, European Commissioner for Information Society and Enterprise, announced the launch of the *e*Europe Awards for Innovation in *e*Government at the Conference. The European Institute of Public Administration (EIPA) has been contracted by the European Commission to manage the eEurope Awards scheme from 2003 to 2005.[2]

The overall objective of the 2003 *e*Europe Awards for *e*Government is to enable and facilitate the exchange of views, experiences and good practices among European countries in the field of *e*Government. The large number of projects submitted in response to the call is clear evidence of the interest there is within the European public sector to share experiences and learn about "Good Practices for Improving Public *e*Services and Transforming Government".

One of the biggest challenges for the successful implementation of *e*Government 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 below, 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 *e*Government services and solutions throughout Europe.

All the projects submitted were of a high quality and displayed a diversity of approaches to similar issues. They were varied and extensive in their scope and breadth, enabling and supporting an invaluable exchange of learning between Europeans across the European Union and beyond. Time and trouble was clearly taken to detail and present the work, which confirms a high degree of interest in and enthusiasm for *e*Government transformation across Europe. These cases provide us with evidence of the changes that public administrations have made within their organisations and of the investment being made in the skills of employees to allow *e*Government to deliver its full potential.

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[1] See also http://europa.eu.int/eEurope: Final Report "From Policy to Practice", Ministerial Conference, Brussels, 29-30 November 2001.

[2] For details refer to www.e-europeawards.org

Analysis of received applications

357 applications were received in response to the call for applications for the 2003 *e*Europe Awards for *e*Government, which was launched on 5 February 2003. This figure represents an increase of 27% on the 282 applications submitted for the 2001 *e*Government label awarded at the 2001 eGovernment Conference "From Policy to Practice".[3]

All applications were received electronically via the *e*Europe Awards web-site and evaluated by at least three expert evaluators from various European countries. For the first time, part of an evaluation for the European Commission took place on an electronic and remote basis via the *e*Europe Awards web application. 66 projects were selected according to their suitability for demonstration at the European *e*Government Conference in Como to be held on 7-8 July 2003, where the final winners will be announced.

The following 7 criteria were applied in the selection:[4]

1. Essential criterion: use of IST (scores weighted 1.5)
2. Criterion: innovativeness
3. Criterion: managing eGovernment implementation
4. Essential criterion: real practical results and impact (scores weighted 1.5)
5. Criterion: functionality
6. Criterion: visibility
7. Criterion: valuable learning points and transferability

29 of the 31 eligible countries (EU Member States, candidate countries and EFTA countries) submitted applications for the *e*Europe Awards for *e*Government. Nevertheless, it is important to bear in mind that the number of applications received does not necessarily fully reflect the state of *e*Affairs in the various countries as it may be influenced by a variety of domestic and international factors.

Interest in participation in the *e*Europe Awards was very high and also shown by countries other than the eligible ones. The *e*Europe Awards Helpdesk received approximately 400 written general queries, among them queries for participation from Argentina, Australia, Croatia, the Philippines, Russia, South Korea, the United States and the ACP (African, Caribbean and Pacific) countries.

The following sections will take a closer look at the cases submitted from different perspectives: firstly, by theme for which submitted; secondly, by target group – citizens or business – of the services; thirdly, by the type of integration and cooperation between public authorities and/or the private sector. The sections "Themes", "Services" and "Integration and Cooperation" may overlap or be logically linked, but it is nevertheless interesting to look at some of the cases from different angles.

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[3] 282 received and 277 evaluated. For details, see European Commission (2002), eGovernment: Analysis of the electronic public services, follow-up to the eGovernment Conference, Brussels, November 29-30, 2001

[4] For details, see the "Guidance Notes" for submission of applications, www.e-europeawards.org.

1. The Themes

Applicants were invited to submit their cases under three themes with a different focus. Breaking down the figures in relation to the three topics of the competition, we can see that the trend reflected by the number of submissions points to a predominant concern with the provision of "a better life for European citizens" (Theme 2), the category under which more than 50% (185) of the applications were received. Overall, the picture is as follows:

> Theme 1: The role of *e*Government in European Competitiveness: 19.89% (71);
> Theme 2: A better life for European Citizens: 51.82% (185);
> Theme 3: European, central and local government *e*Cooperation: 28.29% (101).

Theme 1: The role of *e*Government in European competitiveness

"The role of *e*Government in European Competitiveness" (Theme 1) focuses on the provision of high-quality *e*Services made available to support the development of a competitive knowledge-based economy, contributing to the enhancement of European job creation, productivity and overall competitiveness.

Key aspects in this section are openness and the willingness to share information and experience across Europe and indeed with the wider world. Some of the projects focused on the **development of portals**, opening up European cities 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.

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 cherry-pick 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. one from France, namely MINEFI, Exhibition Catalogue, page 6)[5], each detailing local support and advice structures in place to provide maximum information and backup when needed.

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[5] Please note that reference will be made to the Exhibition Catalogue, also available electronically on www.e-europeawards.org, for all relevant cases.

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 (see Exhibition Catalogue, page 23) is a good example of how technology can overcome distance. The Danish electronic tendering project ETHICS (see Exhibition Catalogue, page 5) 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 (see Exhibition Catalogue, page 15) gives an excellent example of the step-by-step, 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 (see Exhibition Catalogue, page 10), gives us a good model for electronic tax collection which clearly describes the processes adopted to enable secure business transactions.

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 (see Exhibition Catalogue, page 16) 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 (see Exhibition Catalogue, page 13) 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.

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 a number of the initiatives did not fundamentally address the area of modernisation of government processes. However, there were some 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.

Theme 2: A better life for European citizens

> "A better life for European citizens" (Theme 2) focuses on the fact that IST can increase the scale, scope and quality of access to government services and thus promote participation and inclusion in policy making and implementation, as well as a generally improve the quality of life for citizens, households and families.

The role of citizens in the democratic process has clearly grown and evolved with the introduction of *e*Government. 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 (see Exhibition Catalogue, page 48) supported by assistance services for those not familiar with the technology. The Swiss Geneva Internet voting application (see Exhibition Catalogue, page 45) is another good example of citizen *e*Participation in referenda, while the Greek Presidency submitted the *e*-Vote project (see Exhibition Catalogue, page 32), 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 **eDebating** 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 (see Exhibition Catalogue, page 28), 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 (see Exhibition Catalogue, page 43) and the APLAWS project (see Exhibition Catalogue, page 47) 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" (see chapter 2).

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 (see Exhibition Catalogue, page 39) 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 (see Exhibition Catalogue, page 33) is a good example of how education provision at all levels has been revolutionised on the back of *e*Government. 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 (see Exhibition Catalogue, page

30) 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 (see Lin Project, Exhibition Catalogue, page 34) 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 (see Exhibition Catalogue, page 31) 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 (see Exhibition Catalogue, page 41) 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. This project illustrates the type of qualitative and efficiency benefits pointed to in chapter 3.

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 eGovernment have come into their own. An exciting model from the United Kingdom, the 3 Islands Partnership (see Exhibition Catalogue, page 46), 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 focus of the cases submitted is clearly on service provision in a variety of contexts. The aim of the solutions 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 portals and solutions are developed and/or is engaged in policy making and governance through increased access to decision makers via eDemocracy and eDebate solutions.

Theme 3: European, central and local government eCooperation

"European, central and local government eCooperation and public eServices" (Theme 3) focuses on applications that already have or show clear potential to cut across different government levels (local, regional, national and/or pan-European) and/or different types of government units to promote joined up and borderless government.

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 (see Exhibition Catalogue, page 63), in which a virtual **global electronic navigation** chart to facilitate shipping has been established. Another example is the Italian STRADA project (see Exhibition Catalogue, page 60) in which **customs transit operations** have been automated, enabling remote tracking and processing of customs declarations and confirmation of the safe arrival of goods. Sweden, with its Wilma project (see Exhibition Catalogue, page 69), 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. Another important aspect is to break down barriers, freeing Europe from constraints which prevent freedom of movement, even to the point of introducing common laws and procedures. Above all, the reduction of bureaucracy and red tape as well as the introduction of flexibility have given government a human face.

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 (see Exhibition Catalogue, page 52) and the eSV project in Austria (see Exhibition Catalogue, page 50) 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 (see Exhibition Catalogue, page 51) 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.

eProcurement 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 (see Exhibition Catalogue, page 68) has therefore developed a **standard for eProcurement** 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 eGovernment solutions (see chapter 5). Spain organises, via its project "Advertising and Disposing of Seized Property on the Internet" (see Exhibition Catalogue, page 64), 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 (see Exhibition Catalogue, page 59), 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.

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 of 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.
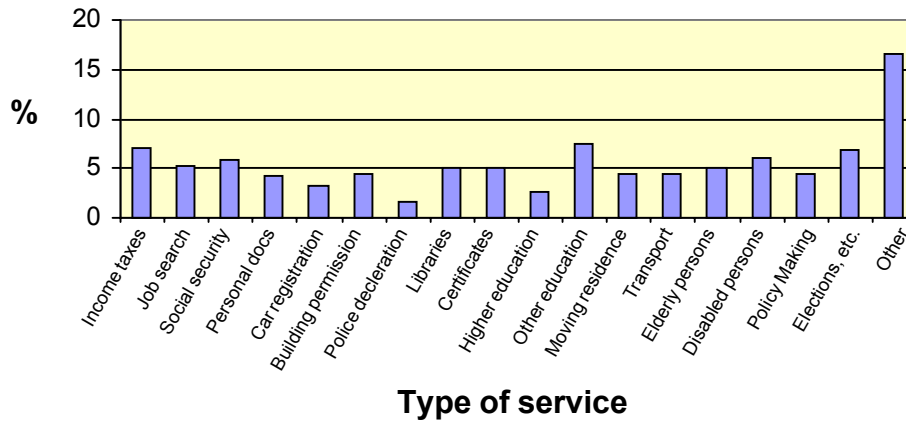

2. Services

Public *e*Services for citizens and business are clearly becoming more personalised, focusing on user-friendliness and accessibility. Some examples also clearly emphasise the increased efficiency due to the re-engineering of (back office) processes. In recent years, portal sites and solutions have been (further) developed and re-engineered to be organised according to user needs.

We will now discuss a number of examples of applications received containing such solutions. It is important to point out that the data below should be not be seen as a sum total of 357 applications received but rather as a relative percentage of the total indicated core services, target groups, levels of cooperation and integration, and type and level of government organisation involved. For, example, a given project may contain only one core service but aim at several target groups and vice versa. This may also be the case when considering the submitting authority, as the majority of cases includes the active involvement of not just one organisation at any one specific level of public administration (local, regional, national or pan-European) but often several.

Public *e*Services for citizens

Public *e*Services for citizens as a % of all received in this category

NOTE regarding graph: "Other services" to citizens include more specific services partly related to the different categories, such as enrolment in schools, services for students and pupils, recruitment services, transport-related services, information on pensions, training of local citizens, etc.

In addition, it features services that are not listed as specific categories in themselves, such as environment-related services, childcare services, geographical information, personal ID's, health-related services, services related to civil justice, cultural services, services related to town and country planning etc.

This category may also include service categories that are not defined in the application form, that overlap, that are too specific and/or are not defined by the applicant.

The most **frequent public services** offered to citizens among the submitted applications are those related to various types of **education and training** activities, followed by services focusing on **income tax** and providing **election solutions**. This not only indicates the perceived benefits of this type of services as an *e*Solution but also gives us an indication of the practical approach taken by the organisations providing such services.

The rationale behind the decision to make **tax services** available electronically is that the various tax collection services generate income for public administrations. 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 solution to this conundrum, as is shown by a Spanish example which has provided a virtual tax office for its citizens and businesses (see Tax Information between Public Administrations project, Exhibition Catalogue, page 65). The model also 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 (see Company registration and tax statements project, Exhibition Catalogue, page 67).

A variety of projects submitted deal with **information services**. This reflects key issues for European citizens and decision makers and provides some evidence of the changes that have taken place in European society. The huge and often inflexible bureaucratic structures of the past are gradually being replaced by reactive, responsive and open government structures which clearly put citizens at the centre of service delivery. A raft of legislation in Belgium resulting from the Copernicus Reform has supported the introduction of more transparent government with simplified access for citizens. At the same time it has introduced a multifunctional, secure identity card which gives citizens and businesses access to a whole range of services and vital information for daily life through the Federal Portal (see Exhibition Catalogue, page 27). The rigid bureaucratic relationship that once existed between Italian government structures and citizens has been replaced by flexible people-centred processes that give citizens access to the heart of the administration via the citizen portal Italia.gov.it (see Exhibition Catalogue, page 37). Another excellent example is a case in Spain whereby all the services delivered to citizens have been brought together in Barcelona's Multi-Channel Integrated Service System MISS (see Exhibition Catalogue, page 44). At the same time, the information contained in the city's databases can now be accessed and scrutinised; these databases already contain a large amount of information supplied by citizens about themselves. Austria has set up a multifunctional service portal for citizens named HELP (see Exhibition Catalogue, page 26), 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. Estonia has, with its Special Citizens Web Portal with Standard DB-Services (see Exhibition Catalogue, page 29), set up a portal that gives citizens secure access to a range of information about them, collected through statutory processes, making the system completely transparent.

As for training and educational information and services, the rationale for electronic developments can be seen in the growing commitment of public administrations to improve the skills of the workforce by offering this type of services. It is relatively easy to make information on opportunities and choices available on a web site. It pays off because of the resulting ease with which initial queries can be answered and the related time and cost savings. It is also relatively cheap to link job vacancies in various organisations through their respective web sites. The field of education and training has also provided some good examples of technology which is used to enable the delivery of multidimensional curricula, reflecting the importance of choice in education and the possibility for students to "seamlessly" progress along appropriate career paths. In this respect, the German BRN (Das Bayrische Realschulnet) (see Exhibition Catalogue, page 9) dealing with preparation for vocational training in the school system is clearly a successful method of approach. A British example, the Learning Centre in Colchester, (see Exhibition Catalogue, page 22) describes a solution to one of the key issues facing schools in The UK today: the shortage of teachers and the need to keep their workload to a reasonable level in order to ensure maximum performance and staff retention. The IT-based resources developed to address these two crucial issues constitute useful models of good practice for others facing similar difficulties.

The IT infrastructure put in place to enable *e*Government not only enhances citizen

access to services and information but also enables direct dialogue between citizens and government, both at national and local level. This has been achieved in Latvia (see *e*Ventspil, Exhibition Catalogue, page 62) by giving all citizens free authenticated e-mail access, providing a personal communication channel, a built-in messaging system and a subscription to active services such as automatic notification of events or the latest news. In Italy, the *e*Government infrastructure has been used to set up a service for providing case information to lawyers, but it may also be accessed by citizens. This has been sponsored by the Italian Ministry of Justice (see *e*Justice project, Exhibition Catalogue, page 11).

The above gives a clear indication of the multitude of services on offer at present, although the high proportion of cases submitted in the "Other Services" category (16.55% or 148 services) also indicates the scattered nature and the diversity of public services. This was followed by the "Other education" category (7.38% or 66 services), "Income Taxes" (7.16% or 64 services) and solutions related to "Elections" (6.82% or 61 solutions). The small margin between the latter three categories gives us a clear indication of the priorities of decision makers and of the type of services which have the greatest perceived benefit for both the public sector and civil society in terms of access, quality and efficiency improvements.

Public *e*Services for business

Public *e* Services for business as a % of all received for this category

Type of service
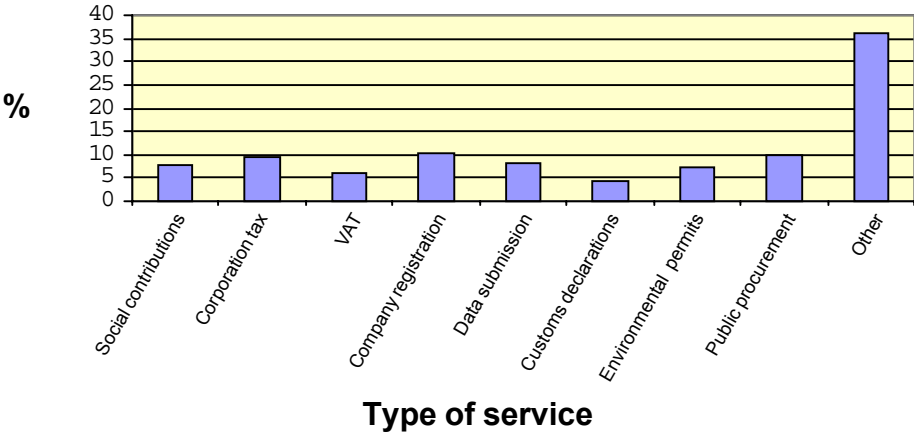
NOTE: "Other services" to businesses comprise more specific services not categorised in the application form. These relate to different categories such as guidance, support for business on eProcurement, local government tendering opportunities, data sharing and information interchange, returns from financial institutions etc.

The category also contains services such as employer services, vehicle registration, tax returns, the multinational electronic navigational chart service for seaborne transport, eCommerce, route optimisation, vehicle monitoring, restricted services for professionals, services for lawyers and judicial operators etc.

This category may also include service categories that are not defined in the application form, that overlap, that are too specific and/or are not defined by the applicant.

In some European nations, business practices have long been shrouded in red tape. The advent of *e*Government and a fundamental rethink about the way business is conducted and services delivered have led to legislation designed to promote flexibility and a responsive environment within which to conduct business transactions. Although submissions including Public *e*Services for Business mainly focus on services related to "Other Services", two Italian projects provide models that clearly show the benefits of this modernisation process. The Italian Integrated Services for Businesses project (see Exhibition Catalogue, page 57) has used information technology to enable swift and unfettered dialogue with both central and local government. The other related Italian project, TELEMACO (see Exhibition Catalogue, page 14), has provided a single virtual office, a portal through which businesses can access a range of information packages to support their activities.

The most prevalent **service solutions** received are those related to **company registration**, **public procurement** and **corporation tax**. Again, 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. Going one step further and generating both an integrated back and front office solution for users and citizens potentially offers a practical way to increase efficiency.

Closely linked with tax collection services for citizens and businesses, **customs services** throughout Europe perform the invaluable task of **controlling trade** and **collecting revenue**. Living in a society dominated by the global market place requires streamlined and secure electronic systems to be able to provide quality services to contractors involved in the movement of goods not only within Europe but worldwide. Sweden has a long tradition of seafaring and sea-based trade, and it is therefore not surprising that this country has been at the forefront in developing secure electronic services to support customs procedures and the secure movement of goods (see Virtual Customs Office, Exhibition Catalogue, page 20). Another excellent example comes from the Turkish Customs Administration (see Exhibition Catalogue, page 21), 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.

In conclusion, we see that the category for which most service solutions were submitted was again "Other Services", with 36.18% (140 service solutions). The following three categories were, as stated earlier, those related to company registration (10.34% or 40 service solutions), public procurement (10.08% or 39 services) and corporation tax (9.56% or 37 services). Excluding the "Other Services" category due to scattered nature of the submissions of this category and concentrating on the latter three, we clearly see that the main concern of the public sector is to increase the quality and access to service provision. This can be seen not only as a result of a need for greater efficiency within the service-providing organisations but also as a desire to combine this with improvements in service provision to the private sector and the resulting benefits for corporate stakeholders and society as a whole.

3. Integration and cooperation

Type of integration, cooperation and partnerships involved as a % of received applications

Type of partnership
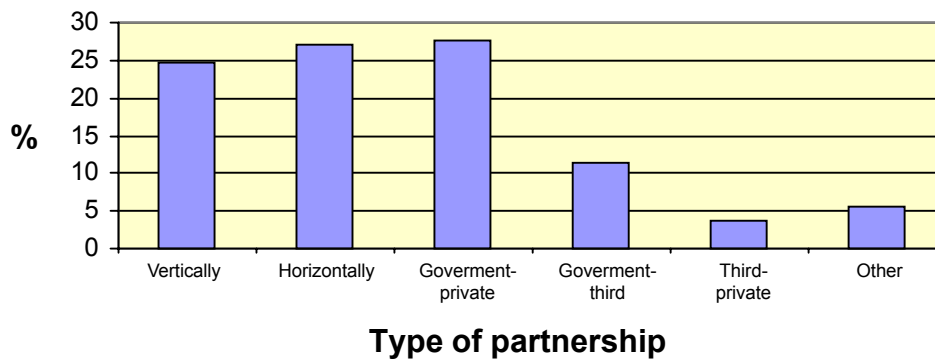
Note regarding graph:
Vertical: Between different levels of government and public administration
Horizontal: Between organisations at the same level of government and public administration
Government-private: Between government/public administration and the private sector
Government-third: Between government/public administration and non-public and non-profit organisations incl. NGOs
Third-private: Between non-public and non-profit, incl. NGOs, and the private sector
Other: This category may also include categories of cooperation that are not defined in the application form, that overlap, that are too specific and/or are not defined by the applicant.

Referring to the type of integration and cooperation of governmental organisations involved, most forms of cooperation are to be found between governmental institutions and the private sector. It 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 (see CAT365 and AOC Services respectively, Exhibition Catalogue, pages 18 and 66). 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.

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 (see, respectively, Lomake.fi, Platform Service-Public Local and REACH, Exhibition Catalogue, page 54,

55 and 56) which enable intergovernmental cooperation supported by a number of different technologies, providing transactional as well as information and advice services. Bulgaria has gone a little further and has enabled web access for government staff to information about citizens if they need this to carry out their work (see Electronic Information System for Civil Registration and Administration, Exhibition Catalogue, page 53). This requires a secure environment, which is ensured through a public key infrastructure using digital certificates stored on smart cards.

Still, this is not to say that cooperation does not take place vertically. On the contrary – the figures related to the type of integration, cooperation and partnerships clearly show a substantial degree of activity as the figures are almost identical to those for horizontal and government-private submissions (see graph above).

Type and level of government organisation involved as a % of total received
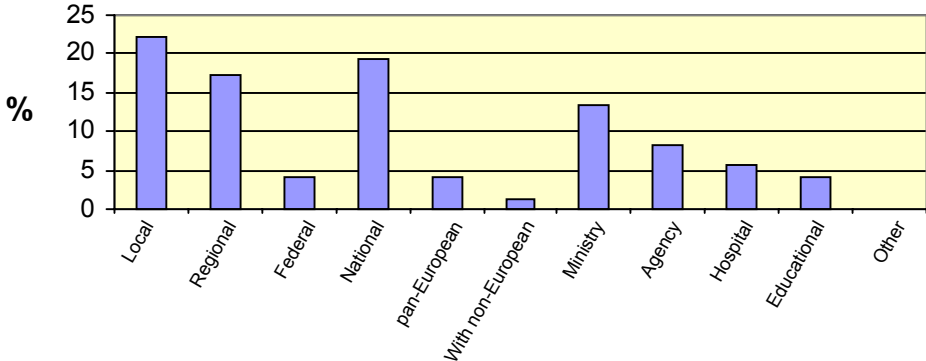
Type and level of organisation

NOTE regarding graph:
Other types and levels of governmental organisations and structures involved are law courts, interdepartmental cooperation at federal level and one-to-one cooperation.
Also note that the category "Federal" should be seen as applying only to the specific level in countries governed on the basis of federal principles.

With regard to the types and levels of government organisations involved, most applications refer to the involvement of local, followed by national, regional and ministerial organisations. What is important to note is that the number of actors, ceteris paribus, falls drastically when comparing the local with the national level of public administration. Seen in the light of the almost equal number of submissions involving public administrations at local and national level, it becomes clear that a limited number of actors and decision makers can increase the speed with which Public eServices penetrate a given level of administration. On the other hand, in exercises such as the eEurope Awards it may be indicative of the perceived distance between the local and the European level, or of a need for the national and European level to give more encouragement to the local level.

Whether top-down implementation and coordination on request by policy and decision makers is due to faster realisation of eGovernment benefits in practice at national level

is hard to say. Neither can it necessarily be said that high motivation and innovative solutions are developed at other levels of public administration, nor that the trend indicated by the sum total of *e*Government applications received necessarily represents a Europe or world-wide trend.

Conclusions and lessons learned

From what has been stated in this chapter, it is clear that the 2003 *e*Europe Awards for *e*Government have enabled the participants to contribute to and learn valuable lessons from the range of projects presented for consideration. They offer a starting point for governments, public authorities and private companies who are considering embarking on new projects. As models of good practice, they go a long way to increasing our knowledge of how to reach all citizens and businesses and include them in the process of government, whilst at the same time adapting the whole approach of administrations and governments to the provision of services for citizens and businesses.

The following conclusions can be drawn:

- 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 key words, and 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 people-centred, 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 individual 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 governments.

- Collaboration with the private sector and among various levels of government is increasing, as is cooperation among different levels of administrations to pave the way for integrated *e*Government solutions.

- There is growing interest in cross-border and pan-European cooperation and service provision. Many of the projects submitted for the 2003 *e*Europe Awards for *e*Government 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.

• Key issues dealt with in the cases include increased efficiency and productivity, addressing the needs of vulnerable groups, skills training and the use of common standards.

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, thus changing the whole face of government in these countries.

Europe is strengthened through information sharing and access to models of good practice which increase our efficiency and reinforce our position on the world stage. European cities and regions are all built on different foundations in terms of language, culture and tradition, and this richness must never be lost. However, efficiencies and rationalisation do not have to detract from essential and inherited values and traditions but can enhance the lives of individual citizens as well as the communities in which they live.

It is clear that Europeans take the concept of modernising and moving forward very seriously. Without the support given to this process by European governments, none of this would be possible. Such political leadership is essential if the *e*Europe project is not to flounder. The European Commission and the programmes it runs provide a valuable forum for discussion, learning and sharing experiences. The experience of *e*Europe is available through databases which have carefully analysed components of many projects and programmes. We must draw on this and on events such as the *e*Europe Awards for *e*Government to top up our knowledge, learn new lessons, identify synergies we can build on and to establish a solid platform for the exchange of good practices in order to forge ahead successfully in the implementation of *e*Government and the wider programme of *e*Europe.

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