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E-GOVERNMENT AND THE DECENTRALISATION OF SERVICE DELIVERY

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Foreword

This paper is the twenty-fifth in a series undertaken by the Committee for Public Management Research. The Committee is developing a comprehensive programme of research designed to serve the needs of the future developments of the Irish public service. Committee members come from the following nine departments: Finance; Environment and Local Government; Health and Children; Taoiseach; Transport; Communications, Marine and Natural Resources; Social and Family Affairs; Office of the Revenue Commissioners and also from Trinity College Dublin, University College Dublin and the Institute of Public Administration.

This series aims to prompt discussion and debate on topical issues of particular interest or concern. The papers may outline experience, both national and international, in dealing with a particular issue. Or they may be more conceptual in nature, prompting the development of new ideas on public management issues. They are not intended to set out any official position on the topic under scrutiny. Rather, the intention is to identify current thinking and best practice.

We would very much welcome comments on this paper and on public management research more generally. To ensure that the discussion papers and wider research programme of the Committee for Public Management Research are relevant to managers and staff, we need to hear from you. What do you think of the issues being raised? Are there other topics you would like to see researched?

Research into the problems, solutions and successes of public management processes and the way organisations can best adapt in a changing environment has much to contribute to good management, and is a vital element in the public service renewal process. The Committee for Public Management Research intends to provide a service to people working in public organisations by enhancing the knowledge base on public management issues.

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General information on the activities of the Committee for Public Management Research, including this paper and others in the series, can be found on its website: www.irlgov.ie/cpmr; information on Institute of Public Administration research in progress can be found at www.ipa.ie.

Executive Summary

E-government is a comparatively recent phenomenon. Within a short period of time, most industrialised countries have embarked upon a programme of making public services and information about the public sector available via the Internet and other Information and Communication Technologies (ICTs). Considerable progress has been made in the online provision of government information to citizens electronically, and it is becoming more common for this information to be organised around citizens' needs and life situations, rather than around administrative structures. In the area of online service provision, however, less progress has been made. Although it is in many countries possible to view, print and submit some application forms and other documents online, full online service transactions (such as applying for a permit/licence and receiving a decision electronically) are still something of a rarity.

E-government is clearly an important area of policy development and indeed has the potential to change the way in which the public sector operates, both internally and in relation to its customers. In Ireland, e-government has been the focus of significant attention as its importance for the public service modernisation programme as a whole has been recognised. This study sets out to provide a clearer understanding of both what e-government is, and where its limits lie; to paint a picture of the developmental stage that Ireland has reached to date; to compare Ireland to other countries with advanced e-government; and to point out ways in which the e-government agenda can be further shaped and advanced.

The terms of reference for this study were to:

1. review and evaluate national/international evidence on relevant e-government initiatives to improve the quality of, and access to, public services with particular reference to the decentralisation of delivery;
2. undertake a number of in-depth case studies at national and local levels in order to explore the management issues and challenges raised by innovatory approaches to e-government and service decentralisation;
3. in the light of best practice and the lessons that can be learned from experiences to date, identify how such key challenges may be most successfully addressed.

Outline of the paper

Following a brief introduction, this study contains six further chapters:

- Chapter Two explains what we mean by the concepts of e-government and decentralisation, and how the two concepts relate to each other. The benefits of e-government are analysed. The developmental stages of e-government, types of e-government services, and applications of e-government at different levels of government are outlined.
- Chapter Three examines the development of e-government in a number of countries that are frequently cited among the most advanced in this area. Following the description of international comparative studies, the e-government

aims, progress and central actors in seven countries are outlined. The analysis of e-government in Finland, Sweden, the United States, the United Kingdom, Australia, Canada and Portugal helps place the e-government experience in Ireland in a comparative context.

- Chapter Four examines the policy background that underpins the pace of development in e-government both at a micro and macro level. At a macro level, the chapter commences by outlining the key national policy documents and agents that have become instrumental in driving e-government. Micro-level developments are also analysed e.g. implementation of e-strategies by individual departments, focusing on the translation of high-level objectives into practical work programmes.
- Chapter Five outlines the driving forces of e-government development in Ireland. The main policy-making and policy-implementing units are described, as are some of the milestones in the roll-out of e-government in Ireland to date. Some departmental e-government initiatives and e-government services that are due to be introduced shortly are outlined, as are planned developments in the (tele)communications infrastructure that will enable broader use and functionality of e-government services.
- Chapter Six analyses in depth the experiences and approaches adopted by two local authorities in Ireland; these, Meath and Donegal County Councils, are at the cutting edge of service delivery change in Ireland.
- Chapter Seven focuses on the remaining challenges that have to be addressed before e-government can achieve its full potential. This chapter discusses three main types of challenges, namely the necessary re-engineering of internal government processes, access to e-government, and ensuring user confidence in online services.

Some key findings

Considerable progress has been made in the area of e-government during the very short time that it has been on the political and public service reform agendas. However, it is clear from this study that Ireland, along with all other countries, is far from reaching the full potential benefits of e-government. It is becoming clear to decision makers in Ireland and elsewhere that: efficiency and the government modernisation goals can only be achieved through re-engineering the way government operates; greater customer focus will be helped when e-government is genuinely accessible to all; and confidence in e-government can only be achieved through clearly demonstrating that electronic service delivery is secure and prevents abuse of the system.

This report highlights the importance of acknowledging that 'e-government is different from conventional government' (OECD 2002a, p.6). E-government is organised more horizontally and openly than conventional government. It makes possible new connections within the public sector and between the state and citizens. Conventional command and control structures are likely to be weakened by e-government, and it is also potentially more collaborative and decentralised in its style of decision-making.

The challenges outlined in this report are by no means easy or straightforward. For e-government to be a success, it has to do no less than marry efficiency of services for

the citizens, efficiency of service provision for the government, and rights for the privacy of service users. In many areas, a balance has to be struck between the social policy aspects of service delivery, efficiency and privacy. The next stage of e-government constitutes as difficult a task as any government is likely to confront in the area of public management. According to many of the key informants interviewed for this study, 'the easy tasks have now been completed'. The tasks that lie ahead are qualitatively different, and significantly more demanding, than the initial stages of the e-government process. Therefore, the study emphasises that the next steps of e-government development will take longer than the initial stages and will require long-term commitment, funding and clear policy vision, combined with persistence, to ensure that the e-government project reaches its full potential.

The proliferation of e-government initiatives and the lack of joined-up e-government mean that one of the most urgent tasks is to integrate and co-ordinate e-government in Ireland. This in turn requires clear strategic vision and leadership, and presents a major organisation development challenge for the public sector as a whole. It is essential that the Public Services Broker be made operational as soon as possible, but is also has to be recognised that the Broker both presupposes and will lead to extensive organisational changes in the public sector at both local and central levels. This organisational change is necessary for successful application of e-government in improving service delivery and in making internal administration and policy making more effective.

1
Introduction

1.1 Research background

Two earlier studies by the Committee for Public Management Research (CPMR) have touched on issues relating to the effective use of information and communication technologies (ICT) for improvements in the quality and delivery of public services, including their decentralisation. Commenting on Information Technology (IT) initiatives such as Ennis Information Age Town, *CPMR Discussion Paper No. 7* drew attention to 'the potential there is for quantum improvements in the delivery of services, by the public sector and other agencies, to the general public through the medium of IT' (p. 55). Likewise, analysis of the case-study evidence presented by the experiences of Meath County Council and the Department of Social, Community and Family Affairs (DSFA) clearly indicated that the creative and innovative use of IT had transformed 'radically not only the quality but also the nature of the services they deliver … The effective deployment of IT solutions has been a hallmark of the approach adopted within the Department of Social, Community and Family Affairs to improving the accessibility, efficiency and effectiveness of the services it delivers'. Similarly, 'Meath County Council has been innovative and pioneering in its informatisation of the organisation in order to transform both its effectiveness and standards of service, as well as to enhance local democracy' (*CPMR Discussion Paper No. 11*, p. 77).

As *A New Change Agenda* for the Irish Public Service (Boyle and Humphreys, 2001) has indicated, when the SMI was initially launched in 1994, it could scarcely have anticipated the scale and pace of developments in information and communication technologies both globally and within Ireland during the last nine years. As PA Consulting (2002) have noted, 'Whereas [*Delivering Better Government 1996*] spoke primarily of the importance of capturing the business process efficiencies represented by IT, there was (not surprisingly) no mention of an e-government agenda' (p. 75). Thus, while *Delivering Better Government* (1996) acknowledged the great potential for effective use of IT to transform the way government business is conducted and to provide new ways of working, developments since that time are continuing to place new demands upon the public service as both a leader and a facilitator of change. Since that time, there have been a number of significant e-government developments, including:

- provision in the 1999 Finance Act for the electronic filing of taxes;
- the development of the e-broker model and website initiatives at national and local government levels, including www.reach.ie, www.basis.ie, www.oasis. gov.ie, www.etenders.gov.ie, www.ros.ie, www.fas.ie, the Land Registry's Electronic Access Service, as well as the websites of individual local authorities and other public service bodies;
- pilot projects involving company records (Enterprise, Trade and Employment), the Public Services Card (Social and Family Affairs), patient records (Health and Children), headage payments (Agriculture and Food), driving test applications (Environment and Local Government) and

- the Education Technology Investment Fund and the implementation of the Schools IT 2000 Initiative (Education and Science).

Such developments also need to be seen within the wider context of extensive investment in science and technology, highlighted in the *National Development Plan 2000-2006*, the Government Action Plan for the Information Society and the preparation by each department/office of its strategy for the development of e-public-services. These strategies should be closely linked with the Customer Service Action Plans as they will impact on the structures for delivery of services.

1.2 Study terms of reference and research approach

At its meeting in December 2001, the CPMR agreed to the commencement of a new study focusing upon e-government and the decentralisation of service delivery, with the following terms of reference:

1. to review and evaluate national/international evidence on relevant e-government initiatives to improve the quality of, and access to, public services with particular reference to the decentralisation of delivery;
2. to undertake a number of in-depth case studies at national and local levels in order to explore the management issues and challenges raised by innovatory approaches to e-government and service decentralisation;
3. in the light of best practice and the lessons that can be learned from experiences to date, to identify how such key challenges may be most successfully addressed.

To deliver effectively on these terms of reference, the agreed research approach for this study involved:

- the review and analysis of available hard-copy and web-sourced documentation;
- semi-structured briefing discussions with key informants;
- in-depth semi-structured interviews with management and other personnel in a small number of individual public service organisations and
- drawing upon each previous element of the research approach to identify and discuss key issues.

Completed in Autumn 2002, this study provides the first overview of international and national good practice at both national and local levels to inform the rapidly developing debate on the potential offered by e-government and the challenges it presents to public service managers.

2
Conceptualising e-government

2.1 Chapter outline

This chapter explains what we mean by the concepts of e-government and decentralisation, and how the two concepts relate to each other. The benefits of e-government are analysed. The developmental stages of e-government, types of e-government services, and applications of e-government at different levels of government are outlined. The discussion in this chapter is primarily conceptual, in the sense that it refers to e-government in general and is intended to have broad relevance, although the benefits and applications of e-government may vary somewhat by country and the specific area of e-government.

2.2 Definition of e-government and decentralisation

The OECD defines e-government as 'the use of new information and communication technologies by governments as applied to the full range of government functions' (OECD 2001a, p. 3). This definition is partly aspirational and partly prescriptive, because at the moment there are few examples of countries where ICTs would be applied to the full range of government functions. Furthermore, it is debatable whether the application of ICTs to all government functions is desirable, particularly if government services thereby become available only to those who have access to ICTs and can use them. However, given that the OECD is an international organisation with a large and diverse membership, the definition tries to capture a wide array of e-government ambitions in different countries (see Chapter 3).

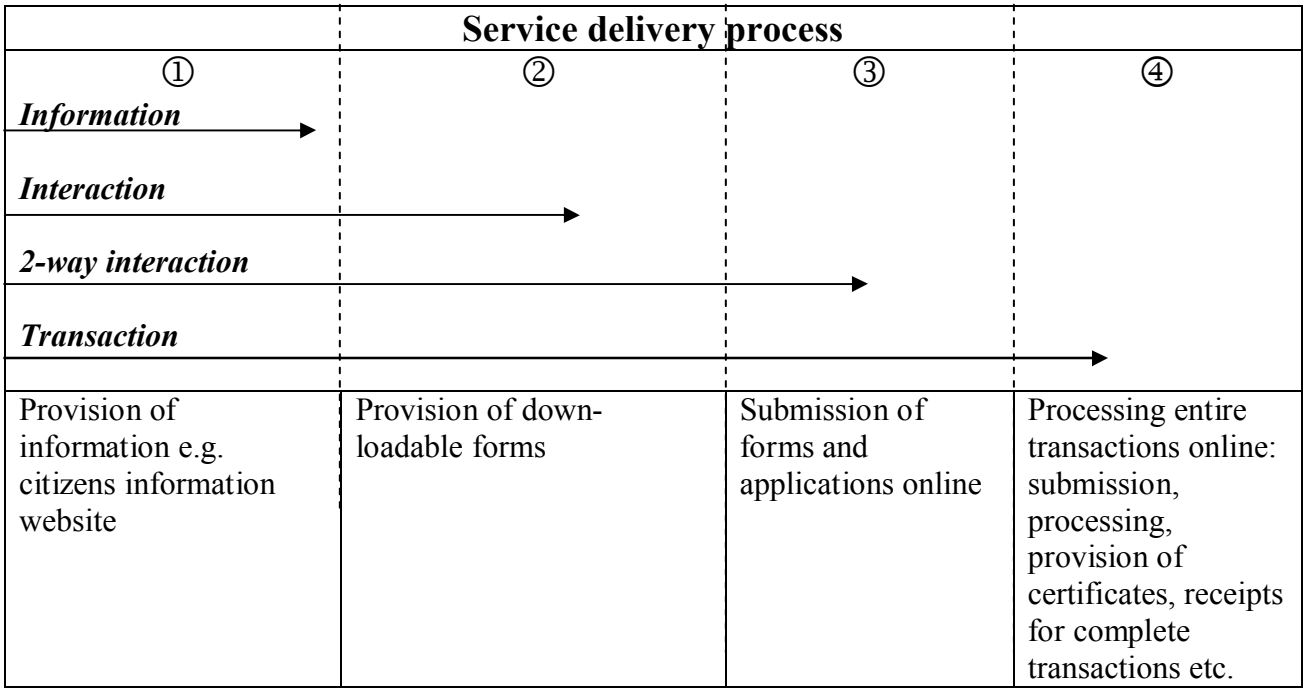
Most definitions of e-government refer to the delivery of information and services online via the Internet. It is important to note at the outset that these are two very different functions: providing information is considerably easier, and already very widespread, whereas service delivery is a considerably more challenging task and one that only few countries have undertaken to date, in a limited number of government services.

In this study, the following definition has been used. E-government refers to the use by public bodies of information and communication technologies to deliver information and services to internal and external customers and organisations, elected representatives and other stakeholders in such a way as to complement, replace or improve traditional delivery systems. This definition embraces the spectrum of current arrangements from information, through interaction to transaction (see Figure 1). It also emphasises the diversity of e-government client groups: the needs of administrators who deliver services can be very different from the requirements of citizens and businesses that use the services. It is also clear from our definition that the full-scale implementation of e-government services to the exclusion of other service delivery channels is not in most cases a desirable option.

Decentralisation in the context of this study refers to the use of ICTs for the delivery of public services to the individual/organisation in a manner most convenient to the end-user. This definition includes the decentralisation of services to private (homes,

offices), community (schools, community centres) and other locations (supermarkets, shopping centres). It may or may not be associated with organisational decentralisation i.e. the relocation of offices or units to different parts of the country. In other words, decentralisation within the context of this study does not refer to relocation or dispersal of government departments and agencies.

Figure 1: Developmental stages of e-government



Source: Cap Gemini, Ernst and Young (2001), e-Europe 2002, a web-based survey on electronic public services http://europa.eu.int/information_society /eeurope/egovconf /documents/pdf/eeurope.pdf

2.3 Different developmental stages of e-government

The 2000 Lisbon summit of the European Council decided that the e-Europe Action plan should be assessed with the help of quantitative and qualitative indicators. The overall aim of this action plan was to make the EU the most dynamic knowledge-based economic zone in the world. In order to benchmark e-government services, a four-stage framework was developed.

- Stage 1 covers on-line information about public services (the information stage).
- Stage 2 covers downloadable forms (the interaction stage).
- Stage 3 covers interactive processing of forms (two-way interaction).
- Stage 4 covers the provision of fully interactive electronic services and involves case handling, decisions and service delivery online (transaction).

This definition was used in the European Commission's 'Web-based Survey on Electronic Public Services', a benchmark exercise for the fifteen EU member states

plus Iceland and Norway, designed to establish the percentage of basic public services available online.

E-government services therefore differ qualitatively in the extent to which they deliver a service via the Internet or with the help of other ICTs ('online'). Figure 1 above illustrates the different stages of e-government service delivery from information provision to full-scale service delivery online.

It is important to note that in some cases it does not make sense for the service user to conduct an entire service transaction online. For instance, some people who use online services to apply for benefits may still want to collect the benefit in person or have it sent in the post, for instance because they do not have a bank account to which the payment could be made electronically. Others may feel more comfortable with availing of one-way interaction-type services such as printing out a form available online, because they do not wish to provide all the requisite personal details online. In other words, the goal when introducing and developing e-government is not to progress irrevocably towards online transactions to the exclusion of the earlier stages. This enables the service users to avail of those services that are most convenient for them; in other words, service users are not forced to opt for full online transactions, but can withdraw from the e-government service chain at a stage at which they are comfortable. As the OECD points out, 'e-government services do not need to be complex to add value' (OECD 2002b, p. 4). For instance, 'information provision services can provide a high level of user value - with only small additional value flowing from the ability to complete related transactions online … understanding user demand and preferences is therefore necessary' (OECD 2002b, p. 15).

A study by the World Markets Research Centre (WMRC) examined the extent to which governments are utilising the Internet in the delivery of information and services. The WMRC study used the following definition of 'online services': in order to qualify as 'online service', it must be possible to carry out an entire transaction online. For instance, where the citizen or organisation has to print out a form and send it by post to an office or an agency, the service does not qualify as 'online'. While a number of countries worldwide have made a lot of progress in placing materials such as publications, legislation, forms and databases on the Internet, the actual delivery of services is in its infancy in all but a handful of countries. Very few countries are presently providing online services, i.e. services that are fully executable online.

It is also important to take note of the different kinds of services that are currently available or being made available online in countries that have made most progress in the area of e-government. The main service categories are outlined below.

The 'returns' function is the least developed one in all countries that are actively implementing e-government. In fact, there are only a handful of examples from other countries of services being delivered online. One of these rare examples is renewing Medicare cards online in the United States. The 'best practice' examples of e-government services (in the area of online service transactions) are usually found among revenue-collecting services (see also Chapter 3 on developments in other countries). In Ireland, too, the Revenue Online Service (ROS) is perceived as the flagship e-government service (see Chapter 5). In other words, it appears that e-government services implemented to date (other than information provision and

simple one-way interactions such as provision of downloadable forms) are more focused on revenue collecting than on returns-type services. There are a number of possible reasons for this emphasis in e-government services. One of the main contributing factors is probably the concern over the control of fraud in the case of online 'returns'-type services: public officials have to be sure of the claimant's identity and this in turn calls for complex data authentication protocols. The problem here, in turn, may be the reluctance of service users to provide the necessary personal information in the online context.

Figure 2: Typology of e-government services

Revenue-collecting services: finance flows from citizens and businesses to the government (mainly taxes and social contributions).
Registration services: related to recording object- or person-related data as a result of administrative obligations.
Returns: public services given to citizens and businesses in return for taxes and contributions.
Permits and licences: documents provided by governmental bodies giving permission to build a house, run a business etc.

2.4 E-government in policy making and internal administration

There are arguably three levels at which governments operate (see Figure 3 below). The most visible parts of the government for most people are its service delivery offices, such as social welfare offices, motor taxation offices and the like. Beyond this visible part of the government lie its internal administrative processes and its policy-making functions. Internal administrative processes relate both to the assessment of applications and issuing of licences and permits (the processes that take place after the citizen has approached the government with a request or a query) and to the processes whereby a department or an agency 'maintains itself' (such as paying of salaries, equipping offices with stationery and so on). The internal-administrative tasks of the government/public sector can also be called government-to-government services in contradistinction to government-to-citizens services. Applications of e-government to internal administration could include electronic parliamentary questions (EPQs) and e-cabinet. In addition to these two practical, day-to-day tasks, the government and its constituent parts also engage in policy making. This refers to the processes whereby aspects of service delivery and internal administration are changed in the light of information on problems and new challenges that call for change. Here, too, e-government can help to achieve greater efficiency and effectiveness, for instance through enabling consultation of service delivery agents as well as user and interest groups over the Internet.

Figure 3: Main tasks of government / public administration

Service delivery: visible, citizen-oriented

Internal administration: invisible, organisation and task-oriented

Policy-making: renewing and changing both service delivery and administration

Not all e-government is alike. E-government services differ by function and client group. For instance, the day-to-day internal management of government departments can benefit from the introduction of elements of e-government, but in a different way than citizen-oriented public services would. Citizen-oriented services in turn can be broken down into those that are targeted at businesses and those that are used by individual citizens. Methods of delivering e-government services that are well-suited to the business community may be unsuited to citizens who are seeking education or welfare services, for instance.

E-government can be applied with great benefit to all three task groups. The focus of this study is on the application of e-government to the citizen-oriented service delivery tasks of government, simply because most attention has been focused on this area to date and because most examples of e-government are to be found in this area. However, we will be pointing out the ways in which government-to-government services, ranging from routine administration tasks such as filling in travel expense claims to high-level decision-making such as e-cabinet initiatives, can benefit from e-government applications. We will return to discussing the potential of e-government to transform policy making and internal administration in the final chapter, where we outline the remaining challenges that have to be met before e-government can reach its full potential.

2.5 Different e-government strategies

A recently launched OECD project takes as its starting point that 'e-government has the potential to be a major enabler in the adoption of good governance practices' (OECD 2001b, p. 2). This is because implementation of e-government calls for changes in the way in which public services are provided: in order to make full use of ICTs, and in order to be combined with ICTs, e-government necessitates re-engineering of decision-making processes and practices (see Chapter 7).

It can be argued that some societies primarily focus on IT as an enabling tool for cost cutting and attaining a competitive edge, whereas other societies have a primary focus on strategies for future initiatives in achieving an information society and identifying the benefits to the community and economy more broadly. While this is obviously a rather crude characterisation, it is nonetheless correct in highlighting the fact that e-government can, and does, serve different purposes. However, the fact that e-government is being implemented for economic reasons does not mean that no benefits will accrue to service users: the economic and societal benefits of e-government can be combined, and one does not exclude the other.

We will now turn to discussing the potential benefits that can be derived from implementing e-government. Note that this section will only discuss the benefits of e-government, and that Chapter 7 focuses on the obstacles and challenges that have to be overcome before these benefits can be fully realised. However, it is important to note already at this stage that the benefits of e-government 'are likely to be marginal if e-government is merely superimposed on existing organisational strategies, structures, processes and culture' (Department of Finance 2002).

2.6 Some potential benefits of e-government

2.6.1 Efficiency

It is no wonder that many internationally competitive countries are at the forefront of e-government developments, or that national e-government agendas are in many cases driven by ministries of finance and linked to economic competitiveness agendas. E-government, when properly designed and implemented, carries considerable potential to speed up administrative processes, to use less human and material resources, and therefore to save time and money. It stands to reason that traditional, paper-based administrative systems have an inherent disadvantage when compared with electronic ones, as online forms and payments are quicker and require less handling of documents, postal costs, personnel costs, storage space etc.

ICTs have the potential to integrate data and facts in a structured and comprehensive way thanks to better knowledge management (Third Global Forum 2001, p. 1). As a result, the rationality of administrative processes can be increased considerably with the help of e-government and associated tools. For instance, the making and processing of documents and claims for benefits and services such as driving licences and medical cards has traditionally been time-consuming and involves multiple copies of paper applications and documents, as well as visits to a number of offices and handling of forms and data by several individuals/offices. However, if electronic data was available for instance to the Revenue Commissioners and health boards, the assessment of a claim with the help of a database and a benefit calculation formula would be very quick and involve virtually no paper work. The citizen could transmit an application form electronically, accompanied by the requisite certified data, the application or parts of it would then be sent to all the authorities/offices involved in handling the case to be assessed more or less automatically, and a decision sent back via e-mail (or ordinary mail if necessary for security reasons). The applicant would in some cases have to identify him/herself in person or by providing the requisite amount of data stored in their personal data vault, but this would involve no more than one personal visit to an office. In short, the storing of information in an electronic format and the integration of services that is made possible by ICTs, make e-government the more efficient option for both service providers and service users.

However, efficiency does not automatically flow from the introduction of e-government. Co-ordinated service provision through a public services broker or a similar core engine is essential to achieve efficiency. Back-office reorganisation is also required in order to carry out complex administrative procedures effectively. The European Commission study established that the best results were achieved through simple procedures and centrally co-ordinated service provision.

2.6.2 Cost savings

It may take time to generate financial savings through e-government. Savings are likely to occur progressively. Government operating budgets are large and relatively small reductions in routine operating costs can amount to considerable savings. For instance, if data entry is effectively transferred from the service provider to the customer (who fills in forms online), significant cost savings can result which can then in turn be invested in improving customer service. This should be a powerful incentive for governments to press ahead with their e-government implementation

agendas. Cost savings and improvements in services are not necessarily conflicting aims, but can be combined successfully for instance through investing all cost savings in improving access to e-government.

Co-ordination is important for achieving cost savings: it is clear that 'government-wide frameworks and infrastructure will reduce the marginal cost of online service initiatives' (OECD 2002b, p. 4) and that 'common action on authentication, security and standards and sharing of experience generally will reduce the cost of the provision of individual services' (op. cit., p. 13). Monitoring of costs is a necessary part of achieving cost savings: evaluation of e-government, including its cost, needs to be improved, given the continuing high level of investment in ICT initiatives (OECD 2002b, p. 5). Note also that the need to maintain alternative service delivery channels (the multi-channel approach) does impact on the business case for e-government initiatives (OECD 2002b, p.7) and will probably 'limit the early potential for significant cost reductions' (Department of Finance/Department of the Taoiseach 2000). However, 'as more of the population become IT literate and have facilities for electronic access, significant opportunities for cost reductions will arise but only if service delivery staff can be used more flexibly than is currently possible' (op. cit.).

2.6.3 Customer friendliness

The European Commission study states that 'citizens deserve to be treated as customers and to form the central focus of administrative service provision' (European Commission 2001, p.10). Provided that e-government services function properly and are widely available, they can be much more user-friendly than government services that are delivered in a traditional format. Information and communication technology holds out the potential to make time and location irrelevant in the service transaction event: services can be accessed from anywhere, at a time that is convenient for the user. This is a major advantage for many different groups of people, for instance those who live in remote locations, are housebound, or simply too busy to conduct their business with the government during office hours.

E-government services are increasingly organised around life events. This is in deliberate contrast to the traditional model of organising service delivery around bureaucratic structures, and reflects the idea that providing information and services should mean responding to the questions and needs of the client (Intelogue 2002, p. 1).

An additional dimension of the customer friendliness of e-government is the possibility of providing virtually instant, and constant, feedback on services (Government of New Zealand 2000, p. 1). Already, many government and public service websites are inviting users to submit feedback (for instance OASIS in Ireland has this facility in a rudimentary form). Provided that this feedback is systematically collated, analysed and acted upon, e-government opens up new possibilities of public service reform in accordance with citizens' needs and wishes.

Catering for the diversity of customer needs is an important part of designing and implementing e-government. If Internet pages, touch-screen facilities and other service delivery media are accessible for people with visual disabilities and hearing difficulties, the level of service provision is greatly improved. Provision of services in other than the main language of the country becomes increasingly important as the

number and diversity of immigrants grows. A good example of a service adapted to the needs of minority language speakers is NHS Direct in the UK, where telephone interpretation is available on request in six languages.

2.6.4 Reduced abuse of the system

Concerns are often raised about the security and privacy of e-government. However, it is clear from examples in the private as well as the public sector that even the most sensitive and private business can be securely conducted online (such as paying taxes). E-government services can be organised in such a way that personal data and certificates are under the complete control of the citizen or other service user, and therefore enjoy greater protection and privacy than traditional paper files.

One often neglected benefit of e-government and the accompanying organisational reform is the reduced scope for fraud and abuse of the system. The more complex an administrative process is, and the more it relies on each office keeping its own records that are not cross-referenced with other records, the more scope there is for fraud. In contrast, an e-government process where the service user authorises the release of data to all agencies involved in the service transaction (multi-agency safety protocols) enables speedy processing of applications and combats fraud.

2.6.5 Perception of the state and customer demands

Many citizens' perceptions of the state and public services are coloured by the experience of visiting multiple offices in search of information and a final answer to their applications. This inevitably leads to frustration and the impression that the public sector wastes resources. While one has to be careful not to idealise e-government, it is nonetheless very likely that its proper implementation would improve the image of public services due to the various benefits that have been outlined above.

The fact that citizens'/customers' demands and expectations are constantly becoming higher and more sophisticated is also of relevance for public services. These increased expectations are the result of developments in the private and public sectors. People are increasingly aware of the potential of IT, as IT applications become more common in business and working lives. As consumers of private sector services, many people have come to expect speedy and convenient service delivery that utilises the most up-to-date technologies (although the full use of such technologies is by no means universal, and is not the first choice of many people, who may prefer to conduct their business on the telephone for instance). The availability of the Internet and other ICTs has both increased the pressure on governments to perform better, and enhanced their ability to do so. If public services fail to keep up with improvements in private service delivery, they stand the risk of being perceived as outdated and inferior. However, it is fair to say that some recent initiatives and changes in the public sector, such as freedom of information legislation and quality customer service initiatives, have also increased people's expectations of government services, and that e-government has to keep up with these expectations (Considine 2001).

In short, implementing e-government is in a very important sense a question of meeting customer expectations and enhancing the image of the public sector, and

these factors should not be underestimated in decisions over investment in e-government.

As the most recent Irish Government Action Plan on the Information Society states, there is a close connection between developments in e-government and the public sector modernisation [SMI] programme. The customer focus of e-government 'aligns very closely with the approach to quality customer service adopted by SMI' (Department of Finance 2002). This involves devolving more decision making closer to the customer, improving financial information systems and creating more effective mechanisms for addressing cross-cutting policy issues (see also Chapter 4). In other words, there are considerable synergies between e-government and the wider government modernisation agenda, and in many ways these two developments must run in tandem as they are highly interdependent. The interconnections between public service modernisation and e-government (including the necessary organisation development) will be discussed in more detail in Chapter 7.

2.6.6 Economic and social change

E-government is a natural accompaniment to many social and economic changes, and can help governments to 'remain responsive and in touch with changing societies and economies' (OECD 2002b, p. 3). As more and more people work long and/or irregular hours (e.g. as a result of increased labour market participation among women), it becomes more unrealistic to expect them to carry out their government business during the traditional 9-5 opening hours and in the traditional office locations. E-government also fits in with similar developments in business and commerce: the use of advanced ICTs in both private and public sector services can contribute significantly to a country's economic development and competitiveness (Blakeley and Matsura 2001 pp. 39-47). Improving services to business through e-government can contribute to productivity across the economy. In many countries, 'online services have already played a strong role in simplifying burdens on businesses by reducing time taken to comply with requirements and providing more convenient access' (OECD 2002b, p. 14).

2.7 Importance of decentralised e-government

Despite the fact that the physical location of departments and agencies may become less relevant as e-government is effectively rolled out, it would be unrealistic to expect that all aspects of information and service delivery will in future be carried out online, and that no need for 'non-electronic' contact will arise. At the minimum, citizens and organisations are likely to need to acquire basic identification documents, such as passports, in person. Furthermore, problems are bound to arise in complex cases and in the case of technical difficulties, which means that government offices must be contactable by telephone, post, or personal visit. In the short to medium term it is also unrealistic to expect all sections of society to be in a position to carry out their business with the government on-line: lack of access to the Internet and inability to use the Internet are still prevalent in many countries, especially among the less educated, older people and some groups of people with disabilities. Contact centres and integrated service centres (see Chapter 6) can play an important part in bridging this gap between citizens and e-government services.

It is therefore clear that combining e-government and service decentralisation has a number of advantages, and indeed the two have to go together if some of the disadvantages of e-government are to be avoided (lack of access, inequality of access). Centralised systems have the danger of not addressing service users' needs as effectively as they could be addressed at the local level (Intelogue 2002, p. 3).

Regardless of whether decentralisation in the area of e-government is deemed desirable or not, there can be little doubt that planning and co-ordination at the central level is necessary if e-government is to become useful, effective and economically valuable. E-government can only function properly when it is based on and adheres to national legal systems and thereby engenders the trust of individuals and institutions. For instance, the use of digital signatures and citizen smart cards has to be backed by data protection and security assurances that only the central state and protection of the rule of law can ultimately guarantee.

2.8 Conclusion

This chapter has concentrated on outlining the benefits of e-government, many of which are already being realised through actual e-government services. It is clear, however, that many challenges have to be addressed before e-government can be properly and fully implemented and used for the benefit of both citizens and public servants. As the following chapters (and Chapter 7 in particular) will show, it is difficult to change service delivery models and practices across the entire government. Budget constraints and differences in existing infrastructure and practices are the most obvious reasons for these difficulties. A balance also has to be struck between collaboration and leadership. Nonetheless, the long-term benefits of e-government from the point of view of service delivery are so great that the initial investment and re-engineering are worthwhile in the medium to long term.

The following chapters will discuss both the policy statements and the practice of e-government in Ireland at the central and local levels. The final chapter will turn to analysing the challenges that are to be met before the full benefits of e-government can be reaped.

3
E-government in other countries

3.1 Chapter outline

This chapter examines the development of e-government in a number of countries that are frequently cited among the most advanced in this area. The chapter starts by outlining the methodology and results of three recent benchmarking studies. While these are not definitive guides, the fact that they tend to highlight the good performance of certain countries consistently is nonetheless interesting and revealing. Following the description of international comparative studies, the e-government aims, progress and central actors in seven countries are outlined. The analysis of e-government in Finland, Sweden, the United States, the United Kingdom, Australia, Canada and Portugal will also help to place the e-government process in Ireland in a comparative context.

3.2 Recent comparative studies of e-government

Comparisons, or benchmarking, of e-government in different countries have become very popular. International organisations, academic institutions and private sector companies have carried out a large number of comparative studies over recent years. While some of these studies have generated a lot of publicity, it is important not to treat them as definitive benchmarks. Assessments of this kind have the character of snapshots in that they capture the situation during a moment in time and therefore tend to ignore changes that are about to take place. As a result, the timing of a study can affect the rank-order of countries assessed. Secondly, all surveys apply definitions and criteria that disadvantage some countries while giving an advantage to others: for instance, the exclusion of local government websites would disadvantage a country that has invested in local as opposed to central e-government.

3.2.1 World Markets Research Centre

The World Markets Research Centre[1] analysed 2,288 government websites in 196 countries, and found that in general, e-government is falling short of its potential. However, the extent to which governments are making use of the Internet in the delivery of information and services varies greatly. Very few countries are presently providing online services, i.e. services that are fully executable online. The survey also documented problems in the areas of privacy, security and access to special needs populations. The Internet's capacity for interactivity is utilised by only a small number of e-government websites: tailoring information according to one's needs and contacting government agencies over e-mail or through message boards is still restricted in most countries.

The WMRC survey found that of the nearly 2,300 Internet sites surveyed, only 6 per cent featured a one-stop services 'portal' or had links to a government portal. Only 8 per cent offered services that are fully executable online. In contrast, 71 per cent provided access to publications and 41 per cent had links to databases. Only 6 per cent of the sites surveyed had visible privacy policies, and a mere 2 per cent of the government websites facilitated access for people with disabilities.

In order to 'rank-order' countries, WMRC created a 0 to 100 point e-government index and applied it to each country's websites. The ranking was based on the availability of contact information, publications, databases, portals, disability access, security statements, and the number of online services. The study evaluated the websites of executive offices (president, prime minister), legislative offices (congress, parliament, assembly), judicial offices (major national courts), cabinet offices, major agencies (health, taxation, education, economic development, administration, foreign affairs, foreign investment, transport, tourism, business regulation etc). However, the study did not include local government websites.

These websites were evaluated for the presence of twenty-eight separate features dealing with information availability, service delivery and public access, including online publications and databases, audio and video clips, disability access, privacy policy and security features, presence of online services, links to a government services portal, digital signatures, credit card payments, search capability, comment form or chat-room, broadcast of events and automatic e-mail updates.

The WMRC study counted a public service as an 'online service' if it enabled the user to carry out an entire transaction online. For instance, where the citizen or organisation had to print out a form and send it by post to an office or an agency, the service did not qualify as 'online'. In the area of online delivery of services, Taiwan was judged the most progressive country, with 65 per cent of its websites offering some type of service. Taiwan was followed by Germany (59 per cent), Australia (50 per cent), Cook Islands (50 per cent), New Zealand (48 per cent) and Singapore (47 per cent). Ireland was not in the 'top 20' countries under this category.

WMRC established that overall the most progressive countries in the area of e-government are the US, Taiwan, Australia, Canada, the UK, Ireland, Israel, Singapore, Germany and Finland. Ireland's 'score' was 46.9 per cent (the 'winning' score of the US was 57.2 per cent). This can be interpreted to suggest that every Irish website analysed had slightly less than half the features that are important for information availability, citizen access, portal access and service delivery.

World Markets Research Centre study: top 10 e-government countries	
US	57.2%
Taiwan	52.5%
Australia	50.7%
Canada	49.6%
UK	47.1%
Ireland	**46.9%**
Israel	46.2%
Singapore	44.0%
Germany	40.6%
Finland	40.2%

3.2.2 European Commission

The European Commission's *Web-based Survey on Electronic Public Services*[2] was a benchmark exercise for the fifteen EU member states plus Iceland and Norway, designed to establish the percentage of basic public services available online in 2001. For this purpose, a list of twenty common online public services was drawn up by the Commission and the member states: twelve of these are aimed at individual citizens (such as income taxes, job search and social security benefits), and eight at businesses (such as social insurance for employers, corporate tax and registration of a new company). It is important to note that the survey only measured the online accessibility of public services directly to the public, and did not evaluate the success of the redesign of administrative procedures. This is a considerable shortcoming as administrative process redesign is a central part of making e-government work.

The Commission's study focused on four aspects (or stages) of e-government service provision, namely information, interaction, two-way interaction and transaction. Information refers simply to online information about public services; interaction refers in this context to downloading of forms; two-way interaction involves processing of forms; and transaction means online case handling, decisions and delivery (see also Chapter 2 of this study). The online availability of public services is measured against these four stages: in some cases the highest stage of service is three, in others four. The score per public service is calculated as a percentage of the maximum, and the overall outcome is a percentage for the twenty public services. This percentage indicates the extent to which services have progressed towards full electronic case handling.

European Commission study: Ranking of some basic public services	
Job search services	81%
Income taxes	74%
VAT	68%
Corporate tax	62%
Registration of a new company	58%
Customs declarations	57%
Submission of data to statistical offices	56%
Social contributions for employees	50%
Public procurement	44%
Social security benefits	43%
Announcement of moving	40%
Personal documents	40%
Public libraries	38%
Enrolment in higher education	37%
Car registration	33%
Birth and marriage certificates	31%
Environment-related permits	29%
Declaration to the police	29%
Application for building permission	27%
Health-related services	7%

It is important to note that the European Commission's survey only took into account public services that are supplied via the Internet. In other words, e-government initiatives that used any other electronic application were not taken into account. This obviously resulted in a less favourable score for countries that had invested in applications other than the Internet (such as telephone services).

The survey produced an overall average score of 45 per cent for the twenty services in the seventeen countries. On average, the most frequently accessible e-government services were found in the areas of job search services, income taxes, VAT, corporate tax, registration of a new company, customs declarations, submission of data to statistical offices and social contributions for employees (all these areas scored 50 per cent or more, the highest score being 81 per cent). At the other end of the spectrum, health-related services, applications for building permission, declarations to the police, environment-related permits and birth and marriage certificates received the lowest scores.

Public services for business were shown to be considerably more accessible (with an average score of 53 per cent) than services for citizens (average 40 per cent). This applies both at the aggregate level and in the case of individual countries, as in almost every country included in the survey business-oriented services score significantly higher than citizen-oriented services.

Four service clusters were analysed separately in the European Commission study, namely the 'income-generating services' (finance flows from citizens and businesses to the government, i.e. mainly taxes and social contributions), 'registration services' (related to recording object- or person-related data as a result of administrative obligations), 'returns' (public services given to citizens and businesses in return for taxes and contributions) and 'permits and licences' (documents provided by governmental bodies giving permission to build a house, run a business etc).

With a cluster average of 62 per cent, the income-generating cluster was the best-performing cluster, in which every service scored higher than the overall average of 45 per cent. Denmark, Norway and France were the best performing countries in this cluster. The best scoring service within this cluster was income taxes (74 per cent).

The cluster of registration services scored on average 44 per cent, slightly below the overall average. Sweden and Finland performed considerably better than other countries in this area. Within this cluster, 'registration of a new company' is the service most frequently offered.

The 'returns cluster' and the 'permits and licences cluster' received rather low scores, although these low overall scores masked considerable variation between countries. Within the 'returns cluster', Sweden, UK, Ireland and Norway performed best. The returns-type service with the highest score was job search (81 per cent). In the 'permits and licences cluster', Ireland was the only exception to the rule that services are very underdeveloped in this area: Ireland's score (71 per cent) was more than double the cluster average.

The European Commission study concludes that e-government is enhanced by co-ordinated service provision and that new administrative procedures (resulting from e-

government) require back-office reorganisation. The best results were achieved by public services that were delivered through simple procedures and that were centrally co-ordinated: examples are job searches, income tax, VAT, corporate tax and customs declarations. The lowest scores were given to services that involve complex administrative procedures and are co-ordinated by local level providers (building permissions, environmental permissions, higher education enrolment). The survey's conclusion recommends co-ordinated e-government solutions that allow local service providers to take advantage of centralised online initiatives offering a single point of contact in the form of portals, with a citizens-oriented approach in contrast to a procedural approach. The survey also recommends extensive back-office reorganisation in order to transform complex transactions into simpler procedures, although it is acknowledged that this is a very time-consuming operation.

The overall 'rank order' of the countries included in the survey was as follows:

European Commission study: Online availability of basic services	
Ireland	**68.42%**
Finland	65.70%
Sweden	61.03%
Denmark	58.63%
Portugal	51.41%
Spain	50.37%
UK	50.22%
France	48.80%
Austria	40.18%
Germany	40.06%
Greece	39.01%
Italy	38.85%
Netherlands	36.57%
Belgium	22.93%
Luxembourg	15.22%

Ireland also topped the poll in the 2002 EU benchmarking exercise, scoring 84.72 per cent compared with the average score of 54.25 per cent. Ireland received full marks in twelve of the twenty benchmarked categories, and for citizen services achieved almost double the European average. Ireland tied with Denmark in second place in terms of services to business (*Business and Finance*, 27 June 2002).

3.2.3 Accenture

The international consulting company Accenture produces its global e-government study on an annual basis. In the 2002 study, Ireland was ranked tenth out of the twenty three countries that were assessed (Ireland was ranked thirteenth in the 2001 study). Canada, Singapore and the US were judged to be the most advanced countries in the area of e-government followed by Australia, Denmark, the UK, Finland, Hong Kong, Germany and Ireland. According to the Accenture report, of the 120 services that the Irish government is responsible for, 107 are available online to some degree. In the area of customer relationship management, Ireland improved its ranking from fourth to second with a score of 46.8 per cent.

Accenture credited the overall improved ratings to better co-operation between government departments, the hiring of staff with experience in private sector customer relations and a focus on ease of use. For instance, Canada has promised to respond to user e-mails within twenty-four hours and the courts in Singapore have allowed certain users to file small claims cases online.

3.3 E-government in Finland

3.3.1 Extent of progress

The e-government process in Finland originates from, and is closely intertwined with, a strong awareness of the potential of ICTs to improve both economic performance and the quality of life for citizens. In 1998, a national strategy on developing the Finnish Information Society was published (*Quality of Life, Knowledge and Competitiveness*)[3]. A Decision-in-Principle that was adopted in 1998 was a key strategy document that contained a commitment to have a large proportion of official application forms available online by the end of 2001[4]. The current government's programme (1999-2003) states that development of the information society and e-government form a key part of economic reform and contribute to increasing the efficiency of public services.

The Citizen's Guide[5] has since 1997 been the key government portal that provides information for both citizens and companies. It contains a large amount of information organised around life stages (children, young people, older people, health, families and so on) as well as a 'form bank', a very comprehensive collection of official application and notification forms that can be downloaded from the Internet.

A new government portal[6] has been designed and implemented by the new Information Management Unit in the Ministry of Finance. It was decided to build the new portal because Finland did not have a comprehensive Internet site/service comprising all public sector organisations. The Act on the Openness of Government Activities and the EU eEurope action plan had also set new and more ambitious targets for the availability of public sector information. It was decided that all government organisations and their services should be found on the same Internet site. The new portal will serve a number of purposes. It will strengthen the openness, visibility and unity of the Finnish public service. It will also promote common standards in the public sector in Internet services such as metadata and WAI (Web Accessibility Initiative). The new portal will improve the accessibility and quality of public services, promote interactivity between citizens and authorities and minimise duplication of work among different authorities.

The new portal will include the old Citizen's Guide, access to all public sector organisations and their services, as well as access to all municipalities and to a common electronic form service provided by the Ministry of the Interior. A public e-mail and contact directory service of civil servants will also be included, as will a sophisticated search engine.

Designing and implementing 'joined-up government' in Finland has been made easier by a number of pre-existing building blocks that facilitate effective e-government. ID numbers and extensive national databases, as well as the practice of re-using key information on citizens within different parts of the administrative and public service

system, obviously make it easier to make full use of the opportunities granted by e-government. For instance, the Finnish census has since 1985 been compiled on the basis of data extracted from thirty government databases, rather than through a separate assessment process as in most other countries. However, this model is not easily transplanted to other countries due to cultural differences (for instance, Ireland is adopting a very different model where all data is strictly under the control of the citizen).

Another factor that bodes well for successful implementation of e-government in Finland is the high proportion of the population with Internet access. A report on *Finland as an Information Society* (2000) concluded that citizens, businesses and government bodies have extensively adopted the use of new information and communications technologies.

E-inclusion has been an important theme in Finland. The JUNA project (Development Project for e-Government)[7] that came to an end in December 2001 aimed to increase the number of services available on the Internet, to ensure that the electronic services are coherent and to prevent the exclusion of citizens and regions from the e-government project. The JUNA project covered all sectors of public administration at both central, state and local level. Following JUNA, an e-government Action Programme for 2002-03 was launched (it had been prepared by the parliamentary sub-committee for e-government).

Public service provision was strongly decentralised in Finland after the Second World War, and provision of public services of similar quality throughout the country is an important principle that is still strongly adhered to. As in Sweden (see below) considerable emphasis is put on preventing exclusion of regions by providing the services of the information society in all parts of the country.

3.3.2 Driving agents

Unlike in most other countries, the Finnish parliament has had an important role in developing the e-government agenda, mostly through the Committee for the Future. This is a seventeen member permanent parliamentary committee that is enshrined in the constitution. Its main task is to envisage and assess the impact of new technologies on the economy and the society.

More recently, the Information Society Advisory Board was established. It is co-ordinated by the Public Management unit of the Ministry of Finance and is responsible for monitoring and predicting Information Society developments. The board reports regularly to the government. The board's first annual report, Finland as an Information Society, was published in 2000[8].

The Public Management unit of the Ministry of Finance has also been responsible for developing the Citizen's Guide. In January 2002, the development projects that had been under the auspices of JUNA were transferred to the Public Administration Development Unit which is part of the Ministry of the Interior.

3.3 E-government in Sweden

3.4.1 Extent of progress

In Sweden, too, the e-government process has been strongly focused on accessibility and quality of public services. In 1998, *Public Administration in the Service of the People* underlined the importance of IT in improving public services. In July 2000, an Action Plan was published outlining how the goals identified in this publication would be achieved. A national strategy for the information society, *An Information Society for All* was passed in the parliament in March 2000. The Act focused on confidence in IT and accessibility of services.

The Swedish government has also invested heavily in establishing regional networks and facilitating access to the broadband network in remote and sparsely-populated parts of the country. As a result, Internet connectivity rate is very high in Sweden, an obvious advantage to the development of e-government. According to Statistics Sweden, over 80 per cent of Swedes have access to an Internet connection.

The main portal to Swedish public services is www.sverigedirekt.com. It was launched in 1997 and is the result of co-operation between central government (Regeringskanliet) and local government (Kommunforbundet and Landstingsforbundet). This Internet site does not collate information or organise it around life events, rather it provides links to a plethora of other public and civil service sites. A recent (www.sverigedirekt.com, 2002) evaluation of SverigeDirekt has recommended several changes, including the transfer of responsibility for the site to Statskontoret (the Swedish Agency for Public Management). The simultaneous existence of Samhallsguiden (a citizens information guide) and SverigeDirekt (the government portal) is confusing, particularly as the former is organised around life events and the latter around government offices and structures. It is also likely that, for the sake of clarity, SverigeDirekt will be merged with the Samhallsguiden[9].

The most advanced Internet services in Sweden are found in the area of electronic declaration of certain taxes[10]. Since March 2001, it has been possible to make tax declarations on the Internet for VAT and employer contributions. An experimental service for ordinary tax payers is starting this year, but will initially allow only the viewing and approval of tax statements. The National Tax Board of Sweden aims to cut unnecessary telephone calls and visits by 50 per cent by 2003. Also, notification of change of address on the Internet will be possible by 2002 and filing of taxes on the Internet can be done by 2003.

Recent initiatives in Sweden include a collaborative project between the Swedish Patent and Registration Office (PRV) and the National Tax Board to develop an Internet site for registering new businesses. This is a one-stop shop that enables the two authorities to share the data and also distributes the data to all other relevant authorities.

A report published by the Statskontoret *The 24/7 Agency - Criteria for 24/7 Agencies in the National Public Administration*[11] sets out suggested criteria relating to 24/7 public sector agencies. One of the central proposals is that such agencies should be conducting a constant review of their services in the light of continuous feedback from citizens and organisations using the service. In late 2000, the Swedish

government also put forward an action plan titled Public Administration in the Service of Democracy. Based on these initiatives, a pilot project (the Servicedialogue Project) has been put in place to help twenty state agencies to achieve the customer service and consultation criteria proposed in the reports[12].

3.4.2 Driving agents

Overall responsibility for e-government lies with the central government, and the Ministry of Industry, Employment and Communications in particular. The SverigeDirekt portal was the result of co-operation between the central government (Regeringskansliet) and the local/district government administrations. Statskontoret is the Swedish Agency for Public Management that is tasked with providing support to the government and modernising public services with the help of IT. The Ministry of Justice and the National Board for Industrial and Technical Development is responsible for work on issues around IT and democracy[13].

3.5 E-government in the United States

3.5.1 Extent of progress

The 1999 White House Memorandum on e-government directed government officials to take action to help citizens gain one-stop access to existing government information and services. These initiatives are supported by key legislation such as the Government Paperwork Elimination Act[14], requiring the government to offer services electronically (where practicable) and to use and accept electronic signatures (where practicable) by 2003, and the Electronic Signatures in Global and National Commerce Act which as of June 2000 has given online contracts the same force of law as paper contracts.

The E-government Act of 2001 was intended to improve citizen access to government information and services. The legislation established a Federal Chief Information Office within the Office of Management and Budget (OMB), to promote e-government and to fund a federal training centre to train information technology professionals.

The key US government portal, www.first.gov, was introduced in 2000. This provides one-stop access to all federal government online information and services. Searches can be conducted by topic rather than by agency, and approximately 20,000 federal websites can be accessed through the portal. Most services are limited to information and downloading of forms, but there are some genuine e-government services such as renewing a Medicare card and applying for some social security benefits online. The US Internal Revenue Service (IRS) has entered into partnership agreements with a large number of private companies that file taxes electronically for their clients (both individuals and companies).

There are also initiatives to link federal and regional government services. Government Without Boundaries is a joint venture between federal, state and local governments to provide a pool of government services that are accessible from any level of government.

3.5.2 Driving agents

The Chief Information Officer's (CIO) Council[15] was established by Executive Order 13011, Federal Information Technology, on 16 July 1996. A charter for the Council was adopted on 20 February 1997. The CIO Council serves as the principal interagency forum for improving practices in the design, modernisation, use, sharing, and performance of federal government agency information resources. The council's role includes developing recommendations for information technology management policies, procedures, and standards; identifying opportunities to share information resources; and assessing and addressing the needs of the federal government's IT workforce.

The Chair of the CIO Council is the Deputy Director for Management for the Office of Management and Budget (OMB) and the Vice Chair is elected by the CIO Council from its membership. Membership of the council comprises CIOs and Deputy CIOs from several federal executive agencies including government departments.

As e-government has become an important part of the President's management agenda, the position of Associate Director for Information Technology and e-Government was created in the Office of Management and Budget (OMB) to lead the effort in achieving the President's e-government vision. The new associate director leads an interagency task force to define an action plan and road map. This includes responsibility for the e-government fund, established in the President's Budget to generate interagency e-government innovation ($10 million has been allocated in 2002 as the first instalment of a fund that will grow to a total of $100 million over three years to support interagency e-government initiatives). OMB will control the allocation of the fund to support information technology projects in the e-government arena.

3.6 E-government in the UK

3.6.1 Extent of progress

The UK government has committed itself to making 100 per cent of dealings with the government available electronically by 2005. As of Autumn 2000, 42 per cent of government services were online, with 73 per cent expected to be available online in 2002. The government has also pledged that everyone who wants it will have access to the Internet by 2005.

In May 2000, the Electronic Communications Act was passed. This confirms the acceptability of electronic signatures and any supporting certificates as evidence in court. It also empowered government departments to amend legislation to remove statutory barriers to the electronic delivery of services or to e-commerce.

All UK government departments are required to publish and update e-strategies every six months, providing the government with the latest snapshot on developments. In October 2000, all main central government departments produced initial e-business strategies, meeting commitments set out in the e-government Strategic Framework (April 2000)[16] and the recommendations of *Successful IT: Modernising Government in Action* (published in May 2000) [17]. These strategies[18] represent an important step

towards achieving the target that all services should be available electronically by 2005.

The primary objective is to transform the quality and responsiveness of government services, ensuring they are based on customer needs rather than the structure of government. In November 2000, 34 per cent of UK residents had Internet access, a considerably lower figure than in many leading e-government countries. In December 2001, there were approximately 2,000 UK online centres where citizens could use the Internet and online services at low cost. The government has envisaged 6,000 such centres in the medium term[19].

One of the most important recent priorities has been the implementation of the UK online portal[20]. The portal, once fully populated with services, will enable citizens and businesses to carry out secure and authenticated transactions with all tiers of government. Building on recommendations in the *Modernising Government White Paper*, information is focused around 'life episodes'. Among the first five transactions enabled by the Government Gateway are income tax self-assessment for Inland Revenue, VAT returns for HM Customs and Excise, making small claims to recover debts, booking a driving theory test and buying a TV licence. The UK online portal also contains 'Quick Find', a powerful search engine which guides users directly to the right information. The portal contains real time government news, and 'CitizenSpace', an experimental example of e-democracy in action and includes a section to make it easy for people to find out about government's plans, and contribute to the formulation of new policies on which the public are being invited to have their say. 'Easy Access' pages give simpler access to the portal for those who are visually impaired or have low reading skills.

A user ID can be obtained through the Government Gateway website (www.gateway.gov.uk). This is the centralised registration service for e-government services in the UK. Once the registration process is complete, the customer can use a single user ID or digital certificate to send and receive certain forms. The online government services currently available through the Gateway are Internet service for self-assessment for Inland Revenue; electronic VAT return; DEFRA (Department of Environment, Food and Rural Affairs) IACS Area Aid application for farmers; PAYE Internet services for employers; and Duty Deferment Electronic Statements for approved traders.

The fact that there is both a UK online portal and a government gateway portal is somewhat confusing. A lot of information for citizens and businesses is available, but there is little transaction capability. For instance, it is possible to fill in a passport application form online, but it will then be sent to the applicant in ordinary post to be signed and returned by ordinary post, which is only a very slight improvement on the more traditional method of applying. The Inland Revenue Internet service appears to be the most advanced in terms of transaction capability, although it is probably slightly behind the Irish ROS. However, the National Audit Office found that four out of five attempts by UK taxpayers to file online failed due to user errors or technical problems. The NAO has also warned the government that it could end up wasting large amounts of money by creating user-unfriendly services. According to the NAO, only 52 per cent of the 524 routine government services currently had an Internet presence, and only 3 per cent allowed users to conduct a transaction.

In addition to the UK Online portal, there are a number of more or less free-standing websites that offer information. NHS Direct[21] offers information on diseases, healthy lifestyles and on where to seek further help. A new CareDirect initiative that is being piloted in six towns includes both web-based information provision and a 24/7 telephone service. In addition to these ICT-based services, some face-to-face surgeries are also available in 'first-stop-shops' for information and advice.

3.6.2 Driving agents

The Office of the e-Envoy[22] was set up in 1999 and is part of the Cabinet Office. The Office is headed by the e-Envoy who reports directly to the Prime Minister. The Secretary of State for Trade and Industry has overall responsibility for the government's e-agenda, and provides the PM with monthly progress reports. The Minister of State for E-Commerce and Competitiveness takes the day-to-day lead on e-commerce issues. The Minister for the Cabinet Office takes day-to-day lead on e-government issues.

The creation of the Office of the e-Envoy followed a recommendation by the Performance and Innovation Unit. The UK e-government group (previously called the Central IT Unit) was set up in 1995 and became part of the Office of the e-Envoy in 2000. The e-government group's work is underpinned by the white paper *Modernising Government* (1999), *e-Government: a strategic framework for public services in the Information Age* (Office of the e-Envoy, 2000) and by the report of the Performance and Innovation Unit, *e.gov: Electronic Government Services for the 21st Century (2000).*

3.7 E-government in Australia

3.7.1 Extent of progress

The strategic Framework for the Information Economy[23] outlined ten key strategic policies for the information economy (e.g. skills, culture, regulation, infrastructure, e-commerce, regional development). The strategy has been periodically updated. The Office of Federal Government Online published Government Online in April 2000 (2000), a strategy that is driven by individual agency initiatives, but contains eight strategic priorities for co-ordinated action. One of the key areas of the strategy is the development of more integrated, cross-agency and cross-jurisdictional areas: this is obviously particularly important in a federal system such as exists in Australia.

The Australian federal government and the Premier of the State of Victoria committed themselves already in 1997 to having all appropriate government services delivered via the Internet by 2001. The Australian Prime Minister recently declared that the Australian federal government had achieved its objective to place all appropriate government services online by the end of 2001. While this is clearly an exaggeration, Australia is nonetheless one of the most advanced countries in e-government, and a number of well-established services are in place in key areas such as tax, employment and services to business. Many online services in Australia have transaction and data interchange capabilities. In addition to developments at the federal level, some innovative services have been introduced at the state, territory and local levels (the State of Victoria has been one of the most progressive ones). Co-operation between

all levels of government in Australia is successful and has led to more effective online services.

Australia has a government portals framework that is intended to provide customer-focused access to resources and services - this can be accessed at www.australia.gov.au. Additional portals have been developed for a wide range of customer groups and service areas, including regional services, youth, families, business, education, employment, women, immigration and health. Examples of e-government services in Australia include Centrelink (social security), the Business Entry Point and lodging of tax returns online. However, Centrelink is only in the process of deciding what services should be placed online and privacy and security arrangements are still in the making.

The Australian Commonwealth Government requires all agencies to use common standards and guidelines pertaining to the types of information provided on their websites, metadata, electronic publishing, accessibility and privacy. NetSpots is a searchable national directory of public Internet access facilities such as public libraries and Internet cafes.

As part of striving towards equitable access to the Internet, a policy framework has been established to tackle the 'digital divide'[24]. Several other initiatives have also tried to deal with this issue, including the Networking the Nation (NTN) and the Social Bonus programmes. These initiatives are designed to upgrade the telecommunications infrastructure in regional and rural Australia.

The development of community-based access centres has been made a government priority in Australia. The Department of Transport and Regional Services is managing a five-year rural transaction centre programme. This is designed to help rural communities to establish centres that will provide access to basic transaction services such as banking, post, phone, fax, the Internet, and social and medical services. It is interesting to note here that emphasis is not exclusively on e-government, 'older' technologies (phone, fax) are also provided. The National Office for the Information Economy (NOIE) is also working with the Department of Transport and Regional Services to improve regional access to government services through a regional portal.

The TIGERS (Trials of Innovative Electronic Regional Services) project in Tasmania[25] involves experimenting with the delivery of integrated services across federal, state and local governments over the counter, over the phone and over the Internet. The services were made available at Service Tasmania shops and these included claims lodgement, information provision, appointment booking for services such as Centrelink, the Australian Taxation Office (ATO) and health and aged care. During a trial period of six months in 2001, rural clients of Centrelink, ATO and the Department of Veterans Affairs could attend interviews through videoconferencing facilities in three rural Service Tasmania shops.

3.7.2 Driving agents

The e-government process is mostly run by the federal government, but some innovations have been initiated at the state, territory and local levels. The National Office for the Information Economy (NOIE) was established in 1997 as the leading developmental and co-ordinating agency for information economy and information

society issues. The Office of Federal Government Online (OGO) had a co-ordinating role in assisting federal government agencies and departments in electronic service delivery. It developed strategic approaches that encompassed all parts of the government and fostered cross-government approaches to service delivery. The Online Council[26] was established in 1997 to operate as a peak ministerial forum across Australian governments. It is chaired by the Minister for Communications, Information Technology and the Arts. Other members include a senior minister from each state and territory. The OGO was incorporated into NOIE and the latter was made an autonomous agency in October 2000.

This fusion of agencies has enabled a more co-ordinated approach to policy development and to technical, regulatory and social issues in the process of developing online services. NOIE reports directly to the Minister for Communications, Information Technology and the Arts. NOIE works closely with the Online Council (OC), a commonwealth, state and territory ministerial body created to promote consistency in the use of information and communication services in government, and with the Ministerial Council for the Information Economy (MCIE), a commonwealth body established by the Prime Minister to co-ordinate a whole-of-government action agenda for the information economy.

3.8 E-government in Canada

3.8.1 Extent of progress

Canada was one of the first countries to make a commitment to developing e-government services. The 1995 *Blueprint for Renewing Government Services Using Technology* and the 1995-97 Information Highway Advisory Council reports are examples of this early vision. Despite the federal structure of the Canadian government, development of e-government is mostly driven by the central government, although the co-operation of state and local governments also seems successful in this area. The management framework for the government of Canada, *Results for Canadians*[27] , provides the overall direction for the management of the Canadian federal government and an agenda for change in public service delivery.

The Government Online (GOL) initiative (also known as Connecting Canadians)[28] is aimed at providing all key government information and services on-line by 2005 (this deadline was recently been extended from 2004 to 2005). The initial target was to have all laws, regulations, policies, information on programmes and services, as well as key forms, available on-line by the end of December 2000. This target has been reached, maintaining the good performance of Canada as demonstrated in comparative studies.

Canada has several websites and portals that integrate information and services according to citizen and business requirements. Most of the material on these Internet sites is information and downloadable forms, but some e-services and online transmissions are possible. For instance, the Government of Canada portal enables people to register themselves while living abroad and to fill in various complaint forms online (and transmit these over the Internet), and offers a selection of e-services such as credit card cost calculator, job finder and student need assessment software (for calculating the amount of student loan the applicant is entitled to).

Canada has several websites and portals that integrate information and services according to citizen and business requirements. Examples of these include the Government of Canada portal[29], the Canada Business Service Centres portal[30], the Canadian Consumer Information Gateway[31], export information at ExportSource[32], information for older people[33] and the Youth Resource Network of Canada[34].

Government Electronic Directory Services (GEDS) provides an integrated directory of all federal public servants. This makes it possible for citizens to find out the contact details of public servants by searching under their surname, first name, telephone number, title, organisation or role. In other words, it is possible for a citizen to search for a public servant's contact details on the basis of for instance their first name and the organisation they work in.

The Canadian government is very careful to emphasise that e-government is intended to complement, not replace, other ways of doing business with the government. The role and importance of older means of communicating with citizens are not going to diminish, as these methods are preferable or easier to use for some groups of citizens. It is also emphasised that the e-government venture is centrally co-ordinated and rolled out in a systematic way so that it reaches the largest possible number of citizens. Under the Service Canada Programme more than 120 in-person access centres will be opened in selected Human Resources Development Canada, Canada Post, Canadian Heritage, Canadian Customs and Revenue Agency, and Industry Canada sites across the country.

Canada is one the most 'connected' countries in the world. The Internet infrastructure is good and all major cities are connected to a high-speed 'backbone'. The government is committed to eliminating financial and social barriers to Internet access: free or low cost public Internet access terminals are available for use at Community Access Programme (CAP) sites in urban, rural and remote communities (including libraries).

3.8.2 Driving agents

Central government, with the co-operation of state and local governments, is the driving agent. The Treasury Board of Canada Secretariat[35], which serves as the employer and general manager of the Government of Canada, is spearheading the e-government agenda and through the Chief Information Officer Branch (CIOB) plays a leadership role in government. Treasury Board Secretariat (TBS) is a very important central government agency as it manages the government's financial, personnel and administrative responsibilities; among other things, it prepares the government's expenditure budget. The Treasury Board includes the Minister of Finance, the Deputy Prime Minister, the Minister of Infrastructure and the Minister of Public Works and Government Services among others. The Chief Information Officer at TBS acts as a technology strategist and expert advisor to Treasury Board ministers and senior officials across the government, and leads Canada's Government On-line (GOL) agenda. A GOL project management office within the CIOB co-ordinates government-wide planning, provides common frameworks to departments and agencies and monitors progress.

3.9 One-Stop-Shops in Portugal

3.9.1 Extent of progress

In Portugal, www.lojadocidadao.pt is a long-established government portal, which provides links to a service for obtaining registration certificates and to a citizens' information site. A large-scale experiment in comprehensive one-stop-shops has accompanied this portal.

The process of introducing one-stop-stops in Portugal started in October 1997. The Portuguese Council of Ministers appointed a team that was responsible for installing in a number of towns a single location (i.e. a one-stop-shop) where a significant number of service users would access the public services that they needed. The team, consisting of five persons, was integrated into the Presidency of the Council of Ministers and reported directly to the Secretary of State for Public Administration and Administrative Modernisation. The Institute of Management of One-Stop-Shops (IGLG) was subsequently established to oversee, direct and monitor the process of introducing and operating one-stop-shops.

The one-stop-shop project in Portugal was not primarily oriented towards internal (re)organisation of services. Instead, the aim has been to simplify processes, to make use of new technologies and to improve the level of service to citizens. As such, the project is clearly part of the public service modernisation process. One-stop-shops are not about creating another public utility, but rather about decentralisation and rationalisation of service delivery. The participating institutions are integrated into a common model and apply common procedures while preserving their autonomy.

The one-stop-shop project started simultaneously in the two principal cities of Portugal (Lisbon and Oporto). Around thirty public service providers operate in these one-stop-shops. The locations of one-stop-shops have been carefully chosen according to criteria that include easy urban access, easy accessibility by public transport and availability of parking spaces. The centres are wheelchair accessible, equipped with audio-visual equipment and facilitate clients with children. All the offices in a one-stop-shop are linked to an Intranet, which facilitates communication as well as the distribution and sharing of documents, and an electronic book of appointments. An electronic system is also in place to count the number of clients per day, the average waiting time and the average time of processing a query. The opening hours for the one-stop-shops are very long, thus enabling working people flexible access (8.30 a.m. to 8.00 p.m. Monday to Friday and 9.30 a.m. to 3.00 p.m. Saturdays)

Services available in the one-stop-shops include those from the water, electricity, gas and telephone utilities; car registration; driving licence applications; passport applications; social security and health services. Currently there are six one-stop-shops in Portugal and they are located in Lisbon, Porto, Aveiro, Viseu, Setúbal and Braga.

The Portuguese Ministry of Public Sector Reform and Administration has also established a website[36] that acts as a gateway to information and services on the Internet. From this gateway one can access Serviço Público Directo (http://spdirecto.infocid.pt), a registration service for civil and commercial

certificates. The gateway site also contains a lot of links to information on Portugal's political and judicial system. From the gateway site one can access the citizens' information site[37] which is organised around life events (citizenship and family; health; education; youth; employment; social security; housing and so on).

3.9.2 Driving force

Responsibility for the initiative lies with the Ministerio da Reforma do Estado e da Administração Pública. The Council of Ministers has been active in initiating projects in this area.

3.10 Some emerging issues

E-government is one of the fastest changing areas of government activity and it is therefore very difficult to gain an up-to-date overview of the development of e-government in one country, let alone internationally. Moreover, as the introduction to this chapter pointed out, country comparisons in this area are frought with difficulties due to rapid change and differences in approach to e-government. Perhaps the most serious shortcoming of e-government surveys has been their failure to take account of the re-engineering of internal government processes that should flow from, and accompany, the introduction of e-government services for citizens and businesses. For instance, the introduction of a government portal is not particularly helpful from the service user's point of view if it only serves as a gateway to a plethora of government departments and agencies that have very poor lines of communication between them.

Nonetheless, some conclusions can be drawn from the above accounts of e-government in different countries. Whereas some countries have chosen to concentrate on ensuring universal access to computers and the Internet before rolling out a significant number of online services, others have put in place extensive services despite relatively low levels of Internet access among the population. Whereas some countries (and these tend to be the most advanced ones) have focused on putting in place public service broker-type portals that constitute a single gateway to all services, others have allowed a more incremental and agency-based development to take place.

In all the countries reviewed here, the main impetus for e-government has come from the central state, and in many (although not all) cases from ministries of finance. The centralised character of the e-government process is in conformity with the conclusion reached in the WMRC study, that e-government works best when it is centrally co-ordinated. The frequent involvement of ministries of finance is probably due to the fact that governments expect large financial savings to result from implementation of e-government: as was argued in Chapter 2, some of the main benefits of e-government are related to efficiency and cost savings.

The most advanced e-government services are in most countries to be found in the area of income-generating services such as taxation (primarily taxation of businesses and VAT). Business-oriented services such as company registration are generally more advanced than citizen-oriented ones, and services that are limited to information and contact detail provision (such as job searches) are also more prominent than more complex services that involve two-way transactions. Businesses may have been better than citizens at large at lobbying for e-government services. In many ways, e-

government is a natural adjunct to e-business and the perceived need to promote the latter in the name of competitiveness may have given governments a greater impetus to develop e-government services for businesses.

Returns-type services, particularly those directed to individual citizens, tend to be the least developed in all countries and indeed it is difficult to find examples in the area of health services, building permissions, birth and marriage certificates and car registration even in the most advanced countries. This is a particularly serious shortcoming because it is to these services that most citizens in all countries relate when they think of the 'state' or the 'public sector'. The nature of the citizen-public sector relationship, and people's view of the state is set to change dramatically once these services are in place.

Despite the limited progress in the area of fully-fledged online service provision, significant progress has been made by all the countries reviewed here in terms of user-friendliness. One of the biggest changes that e-government has brought about is the re-organisation of information around citizens' and businesses' service requirements rather than around government units and procedures. Once this customer-oriented approach is combined with full utilisation of the Internet's capacity for interactivity, significant improvements for service users will result.

In a number of countries, the concept of a portal has not been fully developed and portals have effectively remained gateways to a plethora of government sites. In order to be effective, portals must contain not only links but also the services that citizens and businesses require: in other words, they must be both the starting point and the end point of service delivery. Concentrating all services in the portal enables the creation of a consistent user interface that is highly user-friendly. The countries that perform best in international comparisons tend to be the ones that have advanced closest to this model.

The relationship between central and local government in the area of e-government varies considerably between countries. In many centralised countries, e-government is being implemented in a rather centralised manner. In some federal countries, local and regional governments have also been actively involved. E-government in all countries, whether centralised or federal, would benefit from active co-operation between the central and local levels: while best e-government results are achieved through central co-ordination, local government would often be best suited to actual service delivery due to its proximity to service users.

4
National e-government policy context

This chapter examines the policy background that underpins the pace of development in e-government both at a micro and macro level. At a macro level, the chapter commences by outlining the key national policy documents and agents that have become instrumental in driving e-government. Section 2 provides a cursory look at international benchmarks. A more detailed analysis of benchmarking was provided in Chapter 3. Section 3 assesses progress on the government's objective of having all public services available online by 2005. Section 5 analyses developments at a micro level; it reviews those e-strategies that are intended to provide departments with a blueprint to transform high-level objectives into detailed work programmes over a specified timeframe.

4.1 Policy context at national and local levels

One of the main aims of the Strategic Management Initiative, initiated in 1994, is the provision of high quality, efficient and effective public services. In 1996, *Delivering Better Government* (DBG) reinforced the SMI framework by setting out a 'vision for the civil service' based on six key organisational themes. Information Technology was one of these core themes. DBG acknowledged that some departments had made good use of technology to support decision making and service delivery, but that not all the benefits, in terms of productivity, had been realised. DBG advocated the use of technology in tandem with innovative changes in reporting structures, work processes and information management practices to ensure value for money and to harness the rewards of greater personal and organisational effectiveness.

Similarly, *Better Local Government - A Programme for Change* (BLG) advocated the use of information technology 'in supporting the development of services and improving the quality of service' (BLG, 1996, p.41). BLG provided the national blueprint for the roll-out of the change process in terms of one-stop-shop centres, an integrated service delivery model and by reinforcing the change processes that had already commenced in a number of local authorities. BLG recommended one-stop-shop centres for efficient provision of high quality service to the public in an integrated, customer-oriented manner. BLG stated that local authorities, through 'their multi-purpose remit and wide geographical coverage, are well placed to fulfil this role, building on the existing network of local authority area offices' (BLG, p.36). The ICT vision policy statement for the local government sector clearly has as its core objective 'through the strategic use of Information and Communications Technologies (ICT), to build a local government system which is seen as the first choice for the delivery of a wide range of local services to all citizens, and a strategic partner with central government in preparing for and implementing the Information Society in Ireland' (Department of the Environment and Local Government, May 2000).

Further support for the use of IT to stimulate change was laid down by the partnership process and included in the Programme for Prosperity and Fairness (PPF) (1999). The PPF acknowledges that there has been good progress made in recent years to provide a firm foundation on which to advance further the objectives of the Strategic

Management Initiative (SMI) and facilitate greater improvements in service delivery, resource management and organisational responsiveness. It states:

> The progress made has been based on promoting a strategic management approach, better management of resources, devolution of responsibility and accountability, increasing job satisfaction and openness and transparency in all aspects of service provision, underpinned by the commitment and contribution of public servants to the modernisation process. Complementary initiatives have been implemented to put a stronger emphasis on delivering quality services to meet the needs of recipients and to maximise the use of information and communications technologies (PPF, p. 8).

As shown earlier in Chapter 2, Figure 1, the first government *Action Plan for the Information Society* in January 1999 outlined a three-stranded approach to online delivery of public services. Strand one dealt with information services and a commitment that 'all public service information is available online through the websites of Departments and Agencies, and at the same time as it is delivered through traditional channels'. Strand 2 dealt with interactive services and recommended the 'delivery of public services online, enabling complete transactions to be conducted through electronic channels'. Strand 3 involved integrated services and advocated the 'rearrangement of information and service delivery around user needs, and availability in an integrated manner through a single point of contact with government' (*New Connections Action Plan* 2002, p.15).

The 2000 Accenture report, *Rhetoric vs Reality*, contrasted where governments wanted to be in terms of online service delivery and what they had been able to achieve since their vision statements had been announced. The report found that even the leading governments had completed less than 20 per cent of the journey in terms of their potential for online service delivery. The early developments in e-government were characterised by vision statements which, unintentionally, propelled the rapid development of agency websites limited to publishing information, in order to meet the criterion of 'being online.' Complexity in dealing with government was increased rather than diminished, and putting government online was delivering few benefits to citizens other than an electronic channel for receipt of information. To address this, some governments created a single government website to act as a gateway to the numerous agency-based sites. The 2001 Accenture Report, *Rhetoric vs Reality - Closing the Gap*, found that reality was catching up with the rhetoric. Modest progress had been made in implementing e-government visions, as government executives learned to navigate the issues involved in putting services online. More interactive and transactional capabilities were being delivered online. The most impressive developments were in the countries implementing e-government with the help of a 'think big, start small, scale fast' approach. The Irish government's New Connections Report (2002) further acknowledges the importance of the technologies of the Information Society in redefining the delivery of government services around user needs, and on a 24x7 basis. The report emphasises that these technologies provide

a possible competitive advantage through reduced costs, higher efficiencies, better services and opportunities to allow Irish industry to develop new applications around the electronic government services. Online services can be structured around life

events and their business equivalents and need not be constrained by traditional organisational boundaries. ICTs therefore make possible new connections - both within government itself and between government and the citizen and government and the business users of its services (*New Connections Action Plan* 2002, p.15).

New Connections, therefore, sets out the government's strategy to ensure that Ireland establishes itself as a world leading location for both e-government and e-business and knowledge-based economic activity. It sets out key infrastructures (telecommunications infrastructure, legal and regulatory environment and e-government) and supporting frameworks (e-business, R&D, lifelong learning and e-inclusion) to provide the necessary capacity that will support progress towards an Information Society. It emphasises that e-government should involve government in a leadership role, through encouraging wider engagement with ICTs via its own business processes and service delivery initiatives. A key objective set out in the document is to have all public services that are capable of electronic delivery available online, via the Public Services Broker, by 2005.

To enhance engagement with the Information Society agenda, the government agreed a range of measures in June 2001. As discussed in more detail in Chapter 5 of this report, these measures include a new cabinet committee on the Information Society, a complementary e-strategy at secretary general level and the appointment of a new Information Society Commission. Co-ordination for these new structures is the remit of an expanded Information Society Policy Unit in the Department of the Taoiseach. The aim of the new arrangements is 'to deliver a more coherent overall approach, at the highest level of government, to formulation and implementation of policy on a wide range of issues that increasingly cut across traditional department boundaries - between departments and agencies, and between central and local government' (New Connections 2002, p.4). New Connections also emphasises the importance of a supportive public policy environment as a critical factor in shaping Ireland's development as an Information Society. The 2002 Accenture report, Realising the Vision, found that e-government programs have made considerable strides in terms of sophistication. The rhetoric has been replaced by pragmatic statements about why e-government is critical to economic and social development, with recognition of the barriers to implementation, and clearly articulated strategies. According to the report, Ireland is one of the visionary challengers in terms of e-government. Visionary challengers are classified in terms of overall maturity, as having a solid base of services online and are generally showing some development in customer relationship management.

4.2 International benchmarks

The *New Connections Report* acknowledges the significant progress achieved by Ireland in the previous EU benchmarking exercise in November 2001, in which Ireland performed strongest of all member states in terms of progress with online delivery of public services. The Taoiseach stated that Ireland's leading position in the field of e-government was endorsed by the European Commission in the first ever EU benchmarking exercise, where Ireland scored best overall of seventeen European states (member states plus Norway and Iceland) in terms of the level of sophistication achieved across twenty common online public services. The benchmarking report commended the central e-forms facility and the centralised online citizen's

information service as examples of 'best practice' sites. In terms of previous comparative studies, the Taoiseach emphasised that Ireland's public sector websites came first in a recent study of EU sites by Politics Online website and that they were ranked sixth in the world by the World Market Research Centre in its global e-government survey September 2001 (eGovernment, *Irish Independent*, 14/12/01).

4.3 E-developments

In terms of service delivery, the government has committed itself to the core objective of having all public services that are capable of electronic delivery available online, via the Public Services Broker, by 2005. 'This objective is now a central focus for all Departments and Agencies through their Statements of Strategy under the Public Services Management Act, resulting in the e-government agenda being clearly integrated with mainstream business strategy and objectives' (New Connections 2002, p. 17). *Reach* will be the central point for the delivery of integrated public services through the Public Services Broker. At the launch of the *Reach* agency in September 2000, the Minister for Social Community and Family Affairs outlined its remit: '*Reach* will play a central role in improving the quality of customer service available to personal and business customers of the Irish public service. The development of a Public Services Broker will be a key enabler of these improvements'.

To ensure the momentum of change is maintained, departments will submit quarterly reports to the Cabinet Committee on the Information Society, detailing the progress being made by departments and agencies towards electronic service delivery targets. Departments will have co-ordinating responsibility for agencies under their aegis. An e-government implementation group will monitor and progress the implementation of the e-government agenda (including development of a communications strategy) across the public sector, taking into consideration the role of the *Reach* agency in promoting online services.

4.4 E-strategies

Every government department was requested by the Department of the Taoiseach to complete a strategy for the development of e-public services by December 2000. It was recommended that each departmental e-strategy would include, insofar as its areas of responsibilities were concerned, sectoral interests (e.g. health services, local authorities) and target dates for implementation of each facet of the plan. The majority of departments and offices reviewed by PA Consulting Group in its report *Evaluation of the Progress of the Strategic Management Initiative/Delivering Better Government Modernisation Programme* (PA Consulting Group 2002), had IT strategies (nineteen of twenty-three) and e-government strategies (sixteen of twenty-three) in place. However, the PA report states that there were significant qualitative differences across departments and offices resulting in a significant disparity in the tone and extent of these documents. The PA report emphasises that they ranged from vague, aspirational documents to highly detailed project plans.

As pointed out above, the *Accenture Report* (2002) notes that the most impressive developments in terms of e-government were evident in countries adopting a 'think big, start small, scale fast' approach. Department e-strategies are explicitly underpinned by this approach and the e-strategies are defined in terms of short-term

and long-term initiatives. Some departments have adopted an incremental approach rather than attempting to implement the entire e-public services structure, and have set out quite detailed implementation plans over two to five year timespans. A number of departments' strategies are quite vague in terms of definitive deadlines and lack specific indicators in terms of completion of listed projects or initiatives. In general, good practice examples show a greater adherence to a business plan approach rather than general recommendations. Having reviewed a number of available e-strategies, some best practice examples, in terms of embedding strategy in existing corporate documents, are exemplified by the Department of Enterprise, Trade and Employment, the Department of Social and Family Affairs, the Department of Defence and the Department of Agriculture and Food. As is the case with strategy statements and annual reports, to evaluate strategies in real terms an analysis over a number of years would be necessary, so as to identify a broad spectrum of examples ranging from poor to excellent. The publication of this first set of departmental e-strategies in December 2000 provides elementary guidelines and soft targets in terms of ICT development in the majority of cases, but does not adequately provide us with the basis for an equitable assessment across departments. It would be more appropriate to assess a number of strategies over a number of consecutive years. A positive development proposed by some departments in their e-strategies, is for individual departments to provide progress updates in their business plans against the original timetables laid down in their e-strategies and to provide leeway in terms of exogenous variables that may impact upon the agreed implementation programme.

4.5 Conclusion

The government has made a clear commitment to have all public services that are capable of electronic delivery available online, via the Public Services Broker, by 2005. The policy framework described in *New Connections Action Plan* (2002) lays down the blueprint in terms of strategies and targets to achieve this objective. The 2002 Accenture Report, *Realising the Vision*, acknowledged that e-government programmes have replaced the rhetoric of earlier programmes with pragmatic statements about why e-government is critical to economic and social development, with recognition of the barriers to implementation, and clearly articulated strategies. Accordingly, the *New Connections Action Plan* (2002) affirms that developments in e-government strongly support the modernisation programme and will be crucial 'to issues such as further deepening of the Quality Customer Service initiative, devolving more decision making closer to the customer, improved financial information systems, and effective mechanisms for addressing cross-cutting policy issues'. The action plan notes that a 'key challenge will be to ensure that the full synergies between e-government and the wider modernisation process are realised, including through the SMI Implementation Group of Secretaries General' (*New Connections Action Plan*, p.20).

5
E-government in Ireland: the practice

5.1 Chapter outline

As Chapters 3 and 4 indicate, Ireland has performed relatively well in a number of recent e-government benchmarking exercises. However, these benchmarks have provided only an overview of the complex process of making public services available online. Building upon the context outlined in Chapter 4, the aim of this chapter is to map out in some detail both the institutional framework and the service infrastructure that have emerged to date, and to give a clear overview of current e-government developments in Ireland.

The chapter will start by outlining the driving forces of e-government development in Ireland. The main policy-making and policy-implementing units are described, as are some of the milestones of e-government roll-out in Ireland. Some departmental e-government initiatives and e-government services that are due to be introduced shortly are outlined, as are planned developments in the (tele)communications infrastructure that will enable broader use and functionality of e-government services.

5.2 The policy-development infrastructure

The main e-government policy-shaping government units in Ireland are the Information Society Policy Unit (ISPU) in the Department of the Taoiseach and the Technology Policy Unit (TPU) in the Department of Finance. The former deals primarily with the non-technical, and the latter with the technical side of e-government. These two units have adopted a partnership approach, and together form almost a virtual unit for e-government. A Minister of State at the Department of the Taoiseach with responsibility for the Information Society was appointed in May 2002. The Cabinet Committee on the Information Society, the strategy group at secretary general level and the Information Society Commission provide advice to the government and monitor progress towards the Information Society. The work of these committees is co-ordinated by the ISPU. While much of the strategic thinking behind e-government developments in Ireland originates in the ISPU and the TPU, the detailed descriptions of *Reach*, OASIS, BASIS and ROS below show that agencies have considerable room to shape their own e-government projects and products.

The Department of Finance is also responsible for the Information Society Fund (ISF) in partnership with the Department of the Taoiseach. A committee chaired by the Department of Finance, with representatives from the Department of the Taoiseach, administers this fund. It has been operating for the last three years, and will be operating for a further three, although its future size and operational details are yet to be decided. The ISF was approximately 200 million euro over the last three years (for all information society initiatives, not just e-government). This fund has been a crucial enabler of e-government projects in Ireland.

All in all, the e-government process in Ireland has been relatively decentralised. While significant funding and a basic strategic framework of e-government originate in the two central government departments, agencies and departments have had

considerable scope for innovation and initiative. The example of ROS described below reveals that while some of the ingredients of its success originated in the centre, credit for its dynamism has to be given first and foremost to the factors and individuals operating at the decentralised agency level. More generally, the last chapter of this study will highlight the importance of 'getting the balance right between a co-ordinated e-government approach and agency autonomy' (OECD 2002b, p. 3).

5.3 Current approach to e-government

Most of the key informants interviewed for this study were of the opinion that the potential of cost savings has not been the main driving force behind development of e-government in Ireland to date. In fact, it was considered that the prospect of cost savings has played little, if any, role in motivating the e-government project.

Most interviewees were of the opinion that e-government work in Ireland has been primarily motivated by a genuine desire to make government more efficient, citizen-oriented and customer-friendly; the goal of e-government is to achieve seamless client-centred service delivery. This is reflected in the fact that all the main online information services are organised around the 'life events' of individuals and businesses, rather than around the bureaucratic structures of government. E-government is also recognised and treated as one of the central pillars for progressing the public service modernisation programme in the future.

As e-government development progresses to the next, more demanding, phase, and as funding for e-government initiatives may not be as easily forthcoming as in the past, it becomes more important to justify e-government funding in terms of the considerable cost savings that can flow from it. For instance, great cost savings could be achieved through developing an e-official concept, where routine administrative processes are increasingly shared and co-ordinated. A set of portals is being planned to advance this concept (e.g. electronic parliamentary questions, e-cabinet, e-collaboration).

The following sections will describe the agencies that plan and implement e-government services, and some of the central online services that have come into existence in Ireland to date.

5.4 Reach and the Public Services Broker

Reach is an agency of the Department of Social and Family Affairs (DSFA). Its main task at present is to develop a Public Services Broker (PSB), a single point of contact for accessing all e-government services. Note that the following description of the PSB relates to its basic architecture as planned. It is expected that the Broker will be in place in 2003. An experimental and embryonic version of it exists on www.reachservices.ie. There are a number of elements to the PSB:

1. **Information**, provided in a standardised, uniform format (see discussion on OASIS and BASIS below).
2. **User registration** (for citizens and businesses) to enable them to avail of services online. This in turn calls for some security protocols, expressed in terms of the T scheme[38].

3. **Multi-channel data acquisition environment**. This includes computer access as well as face-to-face contact, telephone contact, use of digital TV etc. It should be possible to acquire data from users through all these channels.
4. **The vault.** This allows users to store their own personal data with confidentiality. The vault contains many data sets. The core identity data set is from the DSFA (outlined in the Social Welfare Bill 2002 - public services identity). There are also other data (certified data), e.g. passport, driving licence, income data. It makes sense for users to have this data stored centrally as they may need to provide it to various officials in the course of applying for services. It is intended that this data vault will be under the complete control of the user. This does not mean that s/he is able to change information in his/her vault, in fact there are areas where this will certainly not be possible (e.g. people won't be able to change their basic personal data such as their PPS number). However, this does mean that nobody can access this data other than the user - s/he must definitively authorise anybody else's access to the data. But if one refuses to release data, one obviously cannot avail of a service that requires the data.
5. **Core broker engine.** This manages the workflows, the distribution of data to agencies, provides acknowledgements of applications, and so on.

The core task for e-government is not simply to provide information or services electronically, but to provide them in an integrated fashion. This means that the user does not have to understand the geography of government in order to avail of services. Many e-government gateways give access to a portal, but there is no standard or uniformity across the agencies to which people are guided from the portal. For instance, if there is a second part to the service that you require, the user needs to go to a different website or service where the information is differently organised, which means that the user still has to locate, and deal with, two or more different service providers (online equivalent of being sent from one office to another).

The intention is that all public services will put their information and services on the PSB, so that users can access all services from one location. Processing of the services will usually take place elsewhere (in the back offices, agency computer systems etc) but the user does not see this and only deals with the user interface which is straightforward and standardised. If a service requires dealing with many different agencies, that can also be accommodated: forms will be built so that if necessary the PSB can break up the form and send the relevant parts to different agencies. All the services on the broker will be standardised and a services catalogue will be available to choose from according to one's service needs. In addition to the PSB, there will be contact centres; it is essential to provide users with a mix of channels so that if they need assistance or if the service breaks down, they can contact a service centre.

It is important to note that the PSB is not intended to become a 'super-broker' that will be responsible for all transactions that service users have with the public sector. Rather, it is likely that a family of brokers will be developed across the public sector, so that there will be for instance a health broker and an education broker for services in the health and education sectors.

As an embryonic form of the PBS, the Reachservices.ie portal went on-line in April 2002: the site was launched but not publicised as the intention is to expand and

improve the service before its public launch. A T1 registration authentication engine has been put in place, and this means that one can fill in some forms online as a registered user, but registration at a higher level of security will be necessary for more sophisticated services. Reachservices will evolve into, or be replaced by, the PSB. The PSB will have more functionality, a wider range of output and possibilities for online, telephone and face-to-face service delivery modes.

In preparation for smooth delivery of citizen services through the PSB, the GRO (General Register Office) that holds all birth, death and marriage certificates is being computerised. A database is being built of the certificates held by the GRO. This computerisation of GRO is funded by the Information Society Fund and is one of the first applications of the virtual private network (VPN). When finalised, this reform will enable the electronic transmission of birth certificates to the DSFA that needs them for assessing a variety of applications and claims.

In the absence of a fully-fledged PSB, a number of free-standing services have been put in place over the last two to three years. The central ones are:

- www.eforms.gov.ie - a form bank that provides forms for filling in both off-line and on-line (under the auspices of the Local Government Computer Services Board (LGCSB)) (launched in Oct/Nov. 01 and now being gradually superseded by the forms service on www.reachservices.ie)
- Online Access to State Information and Services (OASIS) - an information service for citizens organised around life events launched in 2001 (www.oasis.gov.ie)
- Business Access to State Information and Services (BASIS) - an information service and gateway to online service for businesses (launched in 2001) (www.basis.ie)
- Revenue Online Service (ROS) - electronic filing and payment of certain taxes (www.ros.ie)
- Land Registry Electronic Access Service - an electronic database of property ownership records (www.landregistry.ie)
- FÁS e-recruitment service for both employees and employers (www.fas.ie)
- E-tenders - an interactive e-procurement system advertising procurement opportunities with the public sector (www.etenders.gov.ie)
- Driving tests - online application for a driving test with a credit card payment facility (www.drivingtest.ie)
- Central Applications Office online - enables viewing and accepting third level course offers online (www.cao.ie)
- Examination results online - enables viewing of Leaving Certificate results online (www.examinations.ie)
- Public sector recruitment - viewing vacancies and submitting applications to the Civil Service and Local Appointments Commission (www.publicjobs.ie)
- Online local authority library catalogues (www.elibs.gov.ie)
- Physical and social infrastructure in Ireland - including details of local water supply and treatment, landfill sites, telecommunications and transport infrastructures and so on (www.infrastructure.ie).

A more detailed description of three examples of e-government information and service delivery in Ireland, namely OASIS, BASIS and ROS, now follows. Due to

space limitations it is not possible to discuss all the initiatives listed above, and the three case studies were chosen as they represent the biggest and in many ways most successful examples of e-government in Ireland to date.

5.4 OASIS

OASIS was initiated by the 1999 *Information Society Action Plan*. The plan recommended that two online information services be established, one for citizens and one for businesses. The former became OASIS under the auspices of Comhairle (which in turn is under the auspices of DSFA) and the latter became BASIS under the auspices of the Department of Enterprise Trade and Employment.

The OASIS project commenced in January 2000. Prior to this, Comhairle had already looked at the life-events approach to organising citizen information, and it was already operating a citizen information system called Citizen Information Database (CIDB). During 2000, a lot of research was done into what the site and its basic architecture would be like. The embryonic form of OASIS was called the Life Events Database (LED). The OASIS website was launched at the end of April 2001.

Since OASIS was launched, most of the work has consisted of adding content to the website. If downloadable forms (or forms that can be filled online) are available, OASIS provides a link to the form. At the moment, the essential difference between OASIS and Reachservices.ie is that the former provides information whereas the latter is focused on service delivery. Many government, agency and authority websites also have a lot of information available on their Internet sites, but the difference between them and OASIS is that OASIS has collated information across a wide range of areas and presents them from the life-events point of view.

In future, content management systems must be changed so that agencies themselves will update the website. At the moment OASIS 'hoovers' all the information and puts it on the website, but in the long run this is not feasible and agencies will have to do this themselves to ensure accurate and up-to-data data. XML tools exist that will enable, for instance, a government department to create information that would then 'flow' into OASIS without the need for intermediaries who put the information on the site. At the moment (as the above arrangement enabled by XML is not in place) OASIS commissions writers to produce the text that appears on the website: the writers have to research their pieces thoroughly and conform to a model style and structure of writing. The information provided by the writers is also verified by a third party. Some government departments also supply information, and in some cases OASIS staff write up the information on the basis of information found on websites.

OASIS has carried out some usability studies. The first one took place in mid-2001 and was carried out by a specialist company that gave people tasks, and then observed the way in which they used the website. As a result of the information obtained through this study, OASIS redesigned the interface of the site. Another study revealed problems that users were having with the some aspects of the OASIS website. OASIS is also looking into talking to some of the groups that the CAIT (Community Application of Internet Technology) initiative[39] is working with in order to use them as focus groups. The Community Application of Information Technology (CAIT) scheme was launched by the government in 2000, with the objective of bringing the

benefits of the information age to the disadvantaged. Successful applicants from twenty-five community and voluntary groups from around the country secured up to £100,000 funding from the £2.5 million initiative in 2001. The funding may be spent on training, computers, laptops or other aspects of the information age. Comhairle has recently proposed putting Internet kiosks into some Citizen Information Centres (CICs), providing access to OASIS among other things. This would probably start off with pilot projects. In general, all the issues around accessibility and the speed of downloading are very important for OASIS. The site is very plain, without graphics, in order to facilitate fast downloading. The typeface is easy to read, and the style of writing is also clear and simple.

All the information on OASIS is available in English and Irish, and some documents (mainly those relating to moving country, visas, work permits, finding a job etc.) are available in Romanian and French. It is possible that in future information will also be provided in other languages.

Information providers such as CICs need high-speed, cheap Internet access in order to make full use of OASIS. At the moment, most of them are using the Citizen Information Database (CIDB) instead of OASIS, as this does not pose any cost or speed problems (it is not online, but is rather a CD-Rom based database that is updated periodically). There is a certain amount of overlap and duplication between OASIS and CIDB, and the two systems will probably become more closely integrated in future. However, the two systems do to some extent serve different user groups. OASIS is for individual citizens whereas CIDB is for information workers, but this problem could be solved by making it possible to 'drill down' to the more complex CIDB content through the more basic OASIS content.

OASIS, BASIS and other interim solutions may eventually be integrated with the PSB to some extent. The use of XML will make this integration easier. However, it is at the moment uncertain exactly what form such amalgamation will take, or when it will take place. It is important to note that, even in its final form, the PSB will have a lot more information on it than it will have actual services. It will be very important to identify exactly how much and what type of information the user requires: some will need a lot, some only very little. It will also be very important to retain the life-events approach.

5.6 BASIS and related services

BASIS (Business Access to State Information and Services) originated with the 1999 government action plan *Implementing the Information Society in Ireland*. The action plan suggested the creation of a one-stop-shop for business information needs. The Department of Enterprise Trade and Employment (DETE) was made responsible for the BASIS project, and has worked on BASIS together with some other agencies (especially Reach). The purpose of BASIS is to provide online access to information and services, organised around the 'life events' of a business (starting up a business, employing staff, paying taxes, and so on). As with OASIS, the intention is to focus on the needs of businesses, rather than on government structures as the basic organising principle.

The BASIS website was launched in May 2001 and its content was completed in February 2002. The site consists of information on approximately fifty different support services for business, and it is organised around twelve business life events. BASIS acts as an information source and a gateway to other services, i.e. it is the first layer of the online services process. For instance, BASIS tells users how to find ROS for submitting tax returns online, but it does not provide the service directly. In other words, BASIS does not provide any services, rather the service delivery departments and organisations will have to provide them.

The main features of BASIS, in addition to information, include a business-focused news service, a bank of downloadable forms, a search facility for locating some service providers such as FÁS, Enterprise Ireland and the local tax offices, and access to online services (such as ROS and the Public Procurement Portal).

In order to obtain a better idea of government-business interactions and of the kind of services that businesses want from government, BASIS commissioned a study from a private sector consultancy company. The intention was to obtain a better understanding of what should be available online. The final report of the study is available on the BASIS website. The report identified some forty-five transaction services that businesses would like to use. BASIS then selected eight to nine services that appeared to be the top priorities of businesses and they are now in the process of looking into providing these services online in co-operation with the relevant government departments and agencies. BASIS has analysed and designed these new online services and they will then be made available through the Public Services Broker.

It seems that the biggest problem BASIS is facing in providing more online services is the lack of experience of inter-agency information sharing. However, there appears to be increasing willingness to move towards more information sharing. It would be particularly important that DETE, Revenue, the Central Statistics Office and the Department of Agriculture and Food share more information.

At the moment, BASIS staff 'hoover' information from government departments and other relevant information providers and places it on the Internet. In the future, however, it is hoped that agencies and departments will update the information themselves (cf discussion on OASIS above).

There is a very basic facility for giving feedback on each page of BASIS. The BASIS project team is planning to do a review of the website, possibly by using user focus groups to get detailed feedback.

Business-oriented e-government services will probably never be able to replace traditional service delivery channels completely. As a result, government departments and agencies will have to run both channels in tandem. The reason for this is that some services are so complex that they cannot be put online (for instance, in the area of environmental protection the transaction volume is relatively low, and the case material highly complex). It is very important to provide e-government services that people and businesses actually want, can use, and will be comfortable using. The fact that there are many different kinds of businesses (from sole traders to multinationals)

also limits the applicability of e-government services: some businesses, just like some individuals, lack access to the Internet.

As was stated above, BASIS acts as a gateway to a number of other information and service-providing Internet sites. These include ROS (see a separate section below); the Irish Public Sector Procurement Portal (advertises all public sector procurement opportunities); the In-Reg (Insurance Annual Returns system which enables authorised non-life insurance head offices to submit their returns online); the Companies Registration Office (enables users to fill in certain forms online); the FÁS Job Bank and related information (enables employers to advertise vacancies and to view jobseekers' CVs online); and the Land Registry's Electronic Access System (EAS) (provides online access to the Land Registry's database of folios relating to registered land)[40]. The EAS is the public access element of a major new project called Integrated Title Registration Information System (ITRIS) which provides support to internal staff members throughout the registration process.

5.7 ROS

The Revenue Commissioners Strategy for 1997-99 included the goal of electronic filing, and Revenue Online Service (ROS) has since then been put in place very quickly, with successive stages leading to expanded and improved services (the Revenue Strategy for 2001-2003 has reiterated this commitment to exploring and using the potential of electronic services). ROS (www.ros.ie) was launched in September 2000 and has become one of the most successful e-government initiatives in Ireland, and internationally. Briefly, it enables customers to file certain tax returns using the Internet and to view details of their Revenue account information for each of their registered taxes.

One of the aims of ROS has been to reduce the actual number of transactions that Revenue has to deal with, which in turn will lead to efficiency gains and financial savings. It has already achieved a dramatic reduction in the number of customer phone calls that Revenue has to deal with. The striking feature of ROS is its extensive transaction capacity: it offers actual online services, not just downloadable forms and information. An international study on electronic filing services (Confédération Fiscale Européenne 1999), among other studies and evaluations, has rated ROS as one of the global best practice examples in the area of online service delivery.

In April 2001, a customer information service was introduced. This allows users online access to all their details, such as outstanding returns and taxes (income tax, corporation tax, employer tax and VAT). Since September 2001, self-employed individuals have been able to make income tax returns (Form 11) and payments of preliminary tax online. Corporation taxes (CT1) can also be paid online. P30, P35, P45 (employer taxes) and VAT3 tax return forms can all be filed online. The payment options have also been improved and it is now possible to pay by laser card. A ROS debit instruction (RDI) can be set up to debit the customer's account directly.

All but two government departments have now signed up to the service, and some 75 per cent of them are using the system to file. Over half of all local authorities are using ROS. The current goal is to have 50 per cent of all business filings made online by 2005. The original goal of ROS was to have €63.5 million worth of payments pass

through the system within one year of launch. This target was in fact reached within six weeks of going live. Currently, ROS takes about €3.4 billion per year. This represents approximately 12 per cent of the total national take for the relevant taxes.

PAYE customers (ordinary taxpayers) can use ROS only if they are also self-assessed (self employed), VAT registered or employer-registered customers. While services for ordinary taxpayers are not in the process of being introduced yet, it is very likely that the service will be extended to them in the future.

Electronic filing of tax returns has a number of important advantages over traditional paper filing. Most importantly, electronic filing provides customers with a highly flexible service that is not tied to office hours and can be accessed from anywhere. The number of contacts with the tax office (by phone or in person) is reduced, which saves time. The processing of electronic returns is fast as they are processed on a nightly basis. It has been estimated that electronic filing is considerably (50-60 per cent) cheaper than paper filing. Electronic filing also helps to reduce errors on forms (in comparison with paper returns). Improved accuracy is achieved thanks to computer checks and balances (validation). This in turn reduces the need for people to contact tax offices in order to rectify mistakes. Paying online is easy, and acknowledgements are immediately sent to the customer's ROS Inbox. Customers can also file early but not have the payment debited from their bank account before the due date. Electronic filing is virtually paperless and therefore more environmentally friendly.

The process of becoming a ROS customer involves using the Internet, e-mail and conventional post. While this is obviously not as convenient as using the Internet and e-mail only, it is necessary from the point of view of security. The first step is to apply for a ROS access number (RAN) online. The customer then receives this number in the post, and uses it to apply for a digital certificate online. A second letter is then despatched to the customer, this time containing the password. The customer can then use this to access the digital certificate that is downloaded onto the customer's computer to enable secure and private access to all ROS services.

To date, ROS has issued 7,163 digital certificates. However, the actual number of ROS clients is much larger, as one certificate (issued usually to a tax adviser) may cover hundreds or even thousands of clients. It is estimated that, in all, ROS has approximately 200,000 clients. The target number of clients is 420,000.

ROS has been designed to ensure that customers with the minimum equipment can avail of the service. The basic requirement is a PC or Mac with an Internet browser that supports digital certificates. ROS is easy to use, and can be used by people who have basic computer skills. The service is easy to navigate, is organised in an intuitive way, and help texts are available at all stages. For customers in difficulties, an information desk provides assistance over the phone.

ROS is engaged in intensive and ongoing consultation with key interests and user groups such as the Institute of Taxation, accountancy bodies, the Law Society, the Institute of Chartered Accountants, representatives of the motor industry, and so on. Staff from ROS deliver a lot of presentations and nationwide publicity and information campaigns. ROS operates a 'computer gym', a mobile training unit

containing eight PCs. This service has proved very popular and ROS is considering launching another vehicle. ROS also works with the big software companies in order to ensure that their products are compatible with what ROS wants to offer its customers.

By way of providing incentives for people to use ROS, it has used 'carrots' rather than 'sticks', so that for instance the deadline for filing for taxes is longer for those who use ROS, or that ROS users are obliged to retain their records for a shorter time than conventional customers.

There are a number of reasons for the success of ROS.

- **Corporate commitment:** A very important ingredient of success has been the strong corporate commitment from the ROS board. The board saw electronic service delivery as inevitable, and highly desirable. Revenue in general has been one of the leaders in making its services more customer-oriented.
- **Clear strategic leadership:** The ROS board initially appointed a strategy manager who was able to hand-pick a small team of experts.
- **Fast delivery in small units:** The work on ROS progressed very fast, which seems to be key ROS philosophy and probably one of the main reasons for its success; delivering the services bit by bit, but in quick succession, rather than waiting for a big launch. These bits have gradually built up to constitute an impressive service.
- **Astute HR strategies:** Another key ingredient of success seems to have been the way in which the public and the private sectors have worked side by side on ROS; half of ROS developers are from a private sector consultancy, half from Revenue, and they work in the same location. In the early stages, when ROS did not have enough expertise of its own, it outsourced some services to private sector companies. Whereas in Revenue there are two different streams, namely the inspectorate of taxes and the general service, ROS has been able to bring people from both streams to work together.
- **Funding:** ROS has received funding from the Information Society Fund.
- **Back office reorganisation:** ROS was well-positioned to launch online services because Revenue had carried out extensive back-end reorganisation that then enabled the launch of ROS services.
- **Learning from other countries:** ROS has also been very keen to learn from mistakes in other countries. For instance, when New Zealand ran into problems with an equivalent service, ROS sent a small team there to see what had gone wrong.

ROS will eventually plug into the PSB. At the moment this is not possible because the authentication attached to PSB is only at level 1, whereas ROS services addressed at businesses require level 3. ROS staff are, however, working on the PSB with the *Reach* and BASIS teams in particular. ROS is also in frequent contact with the Department of the Environment and Local Government with regard to co-operating on motor taxation which it hopes to put online.

The most important challenge for ROS at the moment is to get the usage rate up, and to develop services in the areas of customs, the building industry, motor taxation and PAYE customers. ROS is constantly organising work shops, particularly with the

bigger service users, in order to go through issues and enable its customers to construct 'wish lists' that ROS then tries to fulfil. All in all, ROS seems highly committed to its user groups, and appears to have a very dynamic attitude to expanding its services.

5.8 E-government within government departments

Departmental e-strategies were discussed in Chapter 4. In practice, all Irish government departments have an Internet site, and many have an Intranet and/or Extranets. Both Internet and Intranet sites require periodic restructuring. Obviously, some departments are more customer service-oriented than others, and a regularly updated, user-friendly Internet site is particularly important for these departments. Many service-delivery departments are currently in the process of identifying all their services that are suited for delivery online.

All departments can benefit from Intranets that make internal communication and administration easier. Intranets can be primarily used for information storage and retrieval, updating of organisation charts and telephone numbers, and so on. On the whole, departmental Intranets are underused and underdeveloped. For instance, electronic travel and subsistence claims systems could be made available on these Intranets, resulting in considerable speed and efficiency gains. It is also important to make sure that, within departments and agencies, the e-department solutions are devised in consultation with the people who are operating/delivering the services.

Many departments have redesigned their websites to a more customer-focused format. Some online services are available on some departmental websites. These include online notification of unemployment and partial online child benefit service on the DSFA website. In future, online services available through departmental websites will include for instance motor taxation, driving licence applications and housing grants applications on the DELG website. The legislation concerning the civil registration system is also being modernised. This is essential for wider and more varied service delivery online as it will make it easier to retrieve copies of certificates.

The performance of departments in the area of e-government has been patchy. Some departments are lagging behind, including many that have diverse public service delivery functions. Cross-departmental co-operation is also in its infancy. One of the reasons for the poor cross-departmental co-ordination in this area may be the fact that there are no rewards for working across traditional department boundaries, e.g. working in inter-departmental working groups is seen as an additional responsibility without commensurate rewards. In the absence of the fully-fledged Public Services Broker, there are a large number of departmental initiatives and agency-driven websites that do not at present amount to a coherent whole. The last chapter of this study will be discussing the changes that are necessary in order to introduce coherence and co-ordination to the somewhat disjointed reality of e-government in Ireland.

5.9 Priority online services

A number of e-government services were prioritised as flagship services and progressed during 2002. Among citizen-oriented services, these include online

- payment of motor tax
- application and payment for driving licences and road haulage licences
- applications for passports, local authority housing and for birth, death and marriage certificates
- access to the planning application and development control process, including online registration of unauthorised developments, commencement notices and objections
- payment of court fines
- application for child benefit (including integration with the birth registration process).

A number of business-oriented services have also been prioritised for online delivery:

- enabling all returns and payments to revenue online
- submitting statistical data to the central statistics office
- paying commercial rates
- integrated access to all public procurement opportunities
- broadening of land registry's electronic access system to more folios and map plans
- application system for work permits
- filing of annual returns to the companies registration office
- renewing patents and trademarks, searching parent and trademark design databases
- applying for a mining licence, for forestry grants and for vessel registration certificates and fishing licences
- notifying change of vehicle ownership.

5.10 (Tele)communications infrastructure

Guaranteeing successful implementation of e-government and ensuring access to online services necessitates adequate bandwidth and affordable telecommunications services. A recent working group on telecommunications assessed the broadband situation in Ireland and recommended improving and installing local access broadband networks. Full use of high-speed data transmission services, key to convenient use of e-government services, calls for affordable, 'always-on' local access. The aim is to ensure such access throughout the country within three years. A national telecommunications policy is also being developed, including policies regarding broadband provision. It has been decided to try out fibre-based metropolitan area networks in nineteen locations throughout the country. These will be built by the local authorities, but it is envisaged that public-private-partnership arrangements will be put in place for maintaining and operating them.

Implementing the Public Services Broker calls for enhanced communications infrastructure between departments, agencies and service users. To this end, a Government Virtual Private Network will be implemented. This is designed to enable fixed and mobile telephone calls to all public sector offices, managed data services for public service Intranets and access to the PSB, and e-working for public sector employees (secure access to government servers and portals from any location).

5.11 Conclusion

In its most recent Information Society Action Plan, the Irish government has committed itself to the aim of 'having all public services that are capable of electronic delivery available online, through a single point of contact, by 2005' (*New Connections*, p. 17). Although a large amount of information, and a number of online services (most of which enable only one-way interaction) have been put in place, the Public Services Broker and the accompanying integration of public service structures are still in their infancy. The last chapter of this study examines the challenges that lie ahead before the above aim of having all public services online can be achieved.

6
E-government at local level

6.1 Introduction

It has already been seen in Chapter 5 that, at national level, there is evidence of a spectrum of different approaches to the utilisation of e-government to improve and, in particular, decentralise the delivery of services. These approaches range from enhanced information provision through the development of more user-friendly websites to transactional and interactional service delivery. Drawing upon the overall review of e-government policy presented in Chapter 4, this chapter analyses in-depth the experiences and approaches adopted by two innovative and pioneering local authorities in Ireland that are at the cutting edge of change in Ireland, Meath and Donegal County Councils.

6.2 Meath County Council: corporate commitment

Within Meath County Council, the modernisation proposals contained in *Better Local Government* (1996) have been acted upon in a rigorous and innovative manner. The advent of the Strategic Management Initiative and, in particular the publication of BLG (1996), provided senior managers in Meath with a timely opportunity and an objective rationale to press forward with a radical programme of change within the authority. In relation to this change programme, the view was taken that there was little point in accepting the status quo as a starting point. Strategic management planning in the council commenced with a fundamental and critical review of the current position, asking where the organisation should be were it possible to make a completely fresh start. In adopting this approach, the council was driven by the two core values of effectiveness and customer service.

As the foreword to the Corporate Plan (1998-2002) makes clear, the inaugural strategic plan for the county signifies a genuine and 'conscious effort to map the strategic direction of the organisation into the next century'. Jointly signed by the chairman and county manager, it states that

> The main purpose of this plan is to inform and guide the strategic management process. In essence, strategic management is about the management of change taking into account the aforementioned challenges and opportunities and in particular emerging values from the external environment. It necessitates new ways of working to address these values, and these new ways require a fundamental review of organisational structures, processes and culture.

The council's mission is 'To promote and implement the sustainable development of our county in partnership with local communities so as to improve the quality of life and living environment of all our citizens'. In particular, one of the strategies to be adopted under the promotion of Information Technology is 'to use IT as the platform for the delivery of a more responsive customer service'.

6.3 Meath County Council: strategic leadership

In operationalising BLG, during the period 1996/98, senior management used a number of approaches. At the outset, a series of consultation seminars were held with all staff. Here the opportunity was provided to explore the implications and benefits of implementing the SMI for the authority. Because each area of the council's work tended to be undertaken in functionally separate 'boxes', staff were also paired off into cross-departmental teams to explore 'how work happens'. In this way, linkages were identified and an acknowledgement gained of the need to separate out information-based work (e.g. reception) from resource control (which was the responsibility of middle management) and resource generation/distribution (which was the responsibility of the management team).

It was also felt strongly that to optimise the human resources available to the council, people should as far as possible be freed, through the use of IT, from the routine administrative tasks which previously had been predominant in the council. Customer service training was provided to a wide cross-section of council staff. In order to exploit fully the opportunities provided by the informed application of improved IT systems for the quality of services delivered to the citizen, and to transform fundamentally the manner in which information flowed and work was undertaken within the council, Meath adopted wholeheartedly an IT-based approach to the way in which it conducts its business.

The key strategic tool adopted by the council, in response to this challenge, was the development of a council-wide Intranet. Strategically, the development of the Intranet has sought:

- to ensure that all levels within the organisation have access to timely information to improve responsiveness e.g. the minutes and agendas of council and other formal meetings, contact details for officials and members, activity reports and detailed breakdowns for many areas of the council's work (e.g. housing, planning, roads etc), key policy documents, advertisements, manager's orders, together with personnel and staff information, and a facility for alerting all staff of up-to-date developments (e.g. road closures) that may be the subject of public inquiry;
- to satisfy the urgent requirement for the integration of IT systems so as to generate one corporate database;
- to help facilitate the process of area-based management and
- to enable front-line staff at all locations to directly input service requests.

A summary version of this information platform, broken down to electoral district level, for elected members, is provided in the form of an Extranet. Similarly, information on council services is made available to the general public via the Internet.

Hand in hand with the progress of the Intranet has been the development of a Geographic Information System (GIS) for roads, planning, environment and other geographically referenced data, as well as the extensive use of document-imaging technology to facilitate progress towards the paperless office. The move from manual to IT-based systems has already transformed a number of parts of the council's work and enabled areas, such as motor taxation, which have been significantly affected by

the growth of the county, to cope with rapidly increased demand without increasing staff resources. Since 1998, an electronic filing system was introduced into the planning and general purposes areas, as a further step in retaining all council files electronically.

6.4 Meath County Council: decentralisation of services

Enabled through the systematic development of new IT-based systems, the lynchpin of Meath's approach to improved customer service is the decentralisation of services away from Navan, the county town, closer to the citizen. This approach was informed by deficiencies in existing arrangements:

- Service provision, apart from information and advice, was all delivered centrally from the council head office in Navan.
- Existing area offices at Navan, Kells, Duleek, Dunshaughlin and Ashbourne acted solely as engineering depots for the roads programme, and providing accommodation for the area engineer and area clerk. The geographical boundaries of the six engineering areas and eighteen work divisions did not coincide well with electoral districts.
- The town councils at Navan, Trim and Kells had their own offices with no integration with the county council area offices.
- The twelve library branches at Navan, Trim, Kells, Oldcastle, Nobber, Ashbourne, Duleek, Athboy, Dunshaughlin, Slane, Laytown and Dunboyne were under-utilised as information sources on council services.

On the basis of the detailed analysis and fundamental review of current operations and methods of service delivery referred to earlier, the council members and senior management agreed upon the following approach:

- In future all services, work programmes, reporting procedures etc, should be on the basis of the five electoral districts.
- New district offices would be provided at Duleek, Ashbourne and Dunshaughlin.
- Existing area and town council offices in Kells, Navan and Trim would be integrated, either in existing or new buildings depending upon capacity.
- As far as possible, existing services and points of contact with the public would be located at district level in order to optimise customer service.
- Every effort would be made to deal with local issues at properly scheduled and public area meetings, thus freeing the council to focus on more strategic policy issues.
- Finally, a major programme of integration of public services would be undertaken in consultation with other public sector bodies.

It was felt that for all new service centres, integration of services would be the primary consideration. This integration would be accommodated in building design, shared reception facilities, multi-skilling of staff through joint training programmes, office sharing arrangements and the exploitation of IT. To date, new district offices /one-stop-shops have been opened at Duleek and Dunshauglin. In July 1998, the council agreed that council area meetings would be held on a monthly basis, in advance of full council meetings, to allow referral forward for decision where

necessary. Such area meetings would also be open to public and press and held in the evenings in order to facilitate attendance.

6.5 Meath County Council: resources

In addition to Duleek already in operation, local service centres will be opened and area meetings will take place at Ashbourne, Dunshaughlin, Trim, Navan and Kells. This programme has been facilitated by support from the Department of the Environment and Local Government as part of its initiative to support appropriate one-stop-shop centres across the country.

6.6 Meath County Council: organisational restructuring

In order to implement this strategic approach to the delivery of council services and the use of e-government, it was also necessary to overhaul fundamentally the existing organisational structure of the council. This organisational review was informed by individual interviews with all staff in those areas of the council's work principally involved in direct service delivery or the administrative back-up to service delivery. In those areas where there was a strong *a priori* argument for very limited potential decentralisation, this analysis was not undertaken. These areas primarily comprised road design, major infrastructural planning, planning control, fire services and the core financial functions. It was felt that these functions are central by nature and required a particular discipline that was neither practical nor efficient to reproduce at local level.

In taking forward the recommendations contained in *Better Local Government* (1996), the council had already agreed to the establishment of a Corporate Policy Group (CPG) and associated Strategic Policy Committees (SPCs). In Meath, four SPCs have been established: Planning and Development; Environment; Transportation; Housing, Social and Community. To support this strategic focus, a three-tier organisational structure was introduced:

- A top tier comprising the county manager and the directors of services. Each director of service has a responsibility for an individual SPC, whose core functions would be policy formulation; resource creation and allocation; performance management and serving the needs of elected members. Each director of service also has particular responsibility for an individual district office.
- A middle tier engaged in core activity centred on the physical, natural and social environment, together with organisation and human resource development. These activities are underpinned by finance and legal resources. The key functions for this group will be to assist in the policy formulation process; to enable the process of policy implementation, and 'getting right the instruments of service delivery' (see McLoughlin 1998).
- A front line whose primary function is to deliver decentralised services. The main functions of this tier are the implementation of policy and programmes; customer service; identifying service gaps and servicing local area committees.

In Meath, the view was taken at a strategic management level that the effective deployment of e-government had to go hand in hand with fundamental organisational restructuring.

6.7 Donegal County Council: background

Donegal County Council, at the outset, also changed the dynamics of its organisational structure as a means of decentralising service delivery and embedding the latest developments in ICT throughout the organisation. A series of reports identified a need to address some fundamental issues if an improvement in the quality of service provided by the council was to be realised. In 1995, the Donegal County Manager established a project team to assess the reports' recommendations for organisational change and the possibility of decentralising the administration. The tasks of the project team were to plan decentralisation, agree its location and recruit consultants. The core activity was to come up with proposals for a new organisational structure. The project team consulted with colleagues across all sections in the organisation and worked with external agencies in terms of the decentralisation plan. They employed an organisation specialist to work on incorporating the theories of Elliott Jacques (*Requisite Organisation* 1996) which advocate a set of principles detailing classification of work by reference to complexity. The internal organisational structure had to be right before the external organisation could be improved. The new organisational structure underpins the cross-functional decentralised model, using ICT as a tool to aid the process.

The Strategic Management Initiative (SMI) (1994) and in particular, the publication of *Better Local Government* (1996) provided the national context for reinforcing the change programme that had commenced within the authority. BLG advocated the development of one-stop-shop centres to serve as a focal point for the delivery of high quality, customer-oriented public services. Based on this document and the decision of members of Donegal County Council, it was decided in 1995 to decentralise council services to district offices based in the six electoral areas in the county. These offices would provide the full range of frontline council services and offer accommodation to staff from a range of statutory and voluntary agencies as part of the council's plans to develop integrated service centres. The implementation of the plan requires a major redeployment of staff from the Lifford headquarters to each electoral area and has implications for the management structure (e.g. area and divisional manager level).

Donegal County Council states in its report (2001), *The Role and Scope of the Contact Centre*, that the Donegal pilot emerged from the work of an inter-agency group on the integration of services to the customer. It also noted that the focus of this work has been to integrate services around the customer and to engender better co-ordination of services where full integration is not yet possible. The report emphasises that, in the light of this work, the *Reach* agency chose Donegal as the pilot site to test and implement the Public Services Broker as it is developed on an incremental basis. The pilot operates across three service delivery channels: walk in, phone and online. The report mentions that, in the Donegal context, it is envisaged that the phone channel will become an important delivery option. PC ownership and Internet connectivity is not high in County Donegal, and therefore the phone and walk in options are expected to be the prevalent delivery channels during the pilot period. In

addition, the report suggests that there will be a significant need for assisted or mediated access to the Public Services Broker, particularly for sections of the community that require regular or frequent access to public services, such as the socially excluded. The report outlines the possible benefits of the contact centre, which will be able to facilitate registration and authentication of customer details and will provide the possibility to use the self-service option for further transactions and services at a later date. Additional benefits include the possibility that claims and applications commenced in one channel can be progressed through another; the contact centre will provide enhanced or additional services to customers who contact other call centres in the first instance and where customers do not manage to complete an application online; the call centre will provide a call back service and therefore incomplete and partially complete applications online can be finalised over the phone. There will also be an assistance phone option for customers in terms of filling applications online.

An important distinction is highlighted between call centres and contact centres. Traditional call centres provide the simpler services, such as information and unifunctional services. In the Donegal context, it is envisaged that a contact centre can move well beyond the call centre concept and offer more complex and added value services. The report says that the interagency model of co-operation being piloted in the Donegal integrated services centres will enable a range of services to be activated and provide information and advice.

In July 2001, a partnership was formed between Donegal County Council, the North Western Health Board, the Department of Social, Community and Family Affairs and FÁS. They appointed a project manager to progress the use of the Public Services Broker in providing integrated inter-agency services to citizens through walk-in channels (integrated service centres), telephone through a contact centre and on a self-service basis through the Internet. The first integrated service centre was opened in Carndonagh in Spring 2002.

Briefly, the integrated services centres (ISCs) in each of the six electoral areas in the County enable the customer to access information, advice and services across multiple channels and multiple agencies at a single point (the centre). It is based on the framework of the Public Services Broker (PSB), which aims to provide a single point of e-access to all public services, irrespective of the delivering agency, level of government or geographical location.

> The Public Services Broker is a design for a national e-government system on which records will be maintained of customer data including personal, means-related and service specific data. Customers will be given the facility to post data in the PSB database and have the data maintained up to date for the purpose of making available information to service providers to assess their entitlement to public services or to facilitate the delivery of these services' (Donegal County Council/ERNACT, 2001, p. 28).

The 2001 report explains that the broker will contain secure personal data vaults under the individual customer's personal control, and personal data will only be released to assist in gaining access to a service at the customer's discretion. The report outlines that the data stored in the data vault would include birth and marriage

certificates, details of income or other means, digital photographs, credit card details, passport details, car registration details and insurance details. The PSB 'will provide a secure means by which customers can prove their identity in self-service, face-to-face or telephone transactions through a Public Service Broker Contact Centre. A secure way of 'applying' for services electronically will also be provided' (Donegal County Council/ERNACT, 2001).

6.8 Donegal County Council: corporate commitment

An important element of the new decentralised structures has been the strong corporate commitment from the senior management team in the council (county manager, directors, managers (area, divisional). The management team saw the possibilities of enhancing service delivery to the public with the help of integrated service centres in each electoral area. Donegal County Council has been one of the leaders in the country in making electronic delivery of services in a community setting available to the public. Active support has also been forthcoming from senior management in the partner agencies.

6.9 Donegal County Council: strategic leadership

The county manager selected a project team to co-ordinate the developments and roll-out of the integrated service centres, in close collaboration/partnership with the agencies (NWHB, DSCFA, FÁS) that were interested in coming on board. A project manager was appointed to explore the possibilities of using the framework of the Public Services Broker to accelerate the provision of integrated inter-agency services to citizens.

6.10 Donegal County Council: decentralisation of services

Using the 'start small, think big, scale fast' approach the first integrated service centre has been set up in Carndonagh and remaining centres are due to be completed in the next couple of years. The idea is to start with a small number of services provided by the partner agencies, Donegal Citizens' Information Service and Money Advice and Budgeting Service. As agencies re-engineer and reorganise, more services will be rolled out, with further linkages to a number of agencies (Revenue, Departments of Education and Science and Agriculture and Food, Teagasc, Údarás na Gaeltachta, Comhairle) that have already been identified. The Donegal ISCs provide a testbed to research and develop the multi-agency service delivery models required to enable the Public Services Broker framework to deliver integrated multi-agency citizen services countrywide.

6.11 Donegal County Council: resources

Funding sources for the ISCs include Donegal County Council, the ERNACT project between the Donegal and Derry local authorities, the Department of the Environment and Local Government, the Department of Social and Family Affairs in relation to piloting Reach, and the partnership agencies.

6.12 Donegal County Council: organisational restructuring

The philosophy advocated by the county manager and his senior management team for the HR/organisational change was based on the book by Elliott Jacques *Requisite Organisation*. A project team was established, and consultation was undertaken with staff at all levels in the organisation. An international organisational specialist was employed to design the structure - based on the levels of complexity of work cross-referenced with the capabilities of employees. Based on this, the management levels were put in place. The electoral area model of decentralisation was underpinned by the new management structures and the ending of the dual structure in the organisation. Generic roles for each managerial post were outlined. In terms of advising organisations intent on the use of ICT/decentralisation as a means of improving service delivery, the management in Donegal County Council emphasise that it is a long haul process (eight years to date) and not a 'quick fix' solution.

6.13 Some concluding remarks

While the emphases and specific approaches adopted by Meath and Donegal, in the development and roll-out of their e-government strategies, have varied, they share a number of common characteristics. They have both adopted radical approaches in responding to the service development needs of their counties. Each had strong leadership and involvement in the roll out of major programmes of change in the ways services are delivered and in the organisations which deliver those services. Effective deployment of e-government has gone hand in hand with significant organisational change in both cases. Similarly, both programmes of modernisation are recognised as requiring long-term action and commitment.

Drawing upon these experiences in local government, together with the evidence presented earlier in this study, it is now possible to identify some of the key management challenges to be faced in the effective use of e-government to enhance service delivery.

7
Issues and Challenges

7.1 Main challenges of e-government

The potential benefits of e-government were outlined in Chapter 2 of this study. These benefits can be summarised under three main headings, increased efficiency and modernisation of government, greater customer focus, and increased security/reduced abuse of the system (see Figure 7 below). It is clear from Chapters 3-6, however, that Ireland, no less than other countries, is far from reaching the full potential benefits of e-government. This concluding section focuses on the remaining challenges that have to be addressed before e-government can achieve its full potential. While the discussion here refers primarily to Ireland, similar challenges are faced by policy makers in many other countries that are moving to the second, and more demanding, stage of implementing e-government. This chapter will discuss three main types of challenges, namely the necessary re-engineering of internal government processes, access to e-government, and ensuring user confidence in online services. Note that the three main benefits and challenges of e-government are inter-related: efficiency and the government modernisation goals can only be achieved through re-engineering the way government operates; greater customer focus is more likely to be achieved when e-government is genuinely accessible to all; and confidence in e-government can only be achieved through clearly demonstrating that electronic service delivery is secure and prevents abuse of the system.

Figure 7: Benefits and challenges of e-government

Benefits	Challenges
Efficiency and modernisation of government • Reduced costs • Increased speed • Greater co-ordination • Reduced duplication	**Re-engineering processes** • Initial costs • Staff re-skilling • Possible re-location
Customer focus • Services delivered where and when needed • Resource and time savings for customers	**Access** • Ensuring equality of access • Acquiring material and knowledge resources • Providing alternative ('traditional') delivery channels
Greater security/reduced abuse of the system • Information checked against multiple data • Complete control of data by service user	**Confidence in e-government** • Assuring users of privacy and security • Putting appropriate safety protocols in place

It is important to acknowledge that 'e-government is different from conventional government' (OECD 2002a, p. 6). E-government is more horizontally organised and

more open than conventional government. It makes possible new connections within the public sector and between the state and citizens. Conventional command and control structures are likely to be weakened by e-government, and it is also potentially more collaborative and decentralised in its style of decision making.

7.2 Re-engineering processes and structures

Bannister (2001) refers to the problems caused by the 'legacy of isolated developments which do not interrelate' (p.65). A number of poorly integrated information systems exist in the Irish civil and public service. If service delivery is to be improved and if the cost-savings associated with e-government are to be achieved, these systems must be properly integrated. Although the 'life-events approach' has been adopted by a number of online information services (including OASIS and BASIS in Ireland), at the level of service delivery, co-ordination is still limited. As Considine (2001) writes, 'the single most fundamental problem with functionally organised delivery of services is their inability to deliver packages of related services required in response to an event or predicament in personal or business life'.

As a recent OECD discussion paper on e-government (2002a, p. 4) points out, 'providing clients or citizens with what they regard as a seamless service would often require much higher levels of co-ordination and co-operation between departments, governments and other service providers in the private and voluntary sectors than now exist'. While more and more government information is organised around life events and situations, e-government's services are still most of the time, and in most countries, organised into vertical 'silos'. These vertical systems of service provision need to be systematically integrated so that the user of e-government services can access all relevant services through a single customer service point. This is obviously a considerably more demanding exercise than re-organising information around themes, and one that requires extensive reorganisation of offices, processes and work practices. When delivering transactional e-government services online, and in particular when delivering those services in co-operation with other agencies, government departments and agencies 'will have to operate to strict service and timeliness guarantees and will have to arrive at service level agreements with the operators of the e-broker service' (Department of Finance/Department of the Taoiseach 2000). Achieving this level of co-ordination is obviously a major organisational development and co-ordination challenge for the whole of the public sector.

Making data available to all public service agencies involved in a service transaction is a vital component of co-ordinated service delivery, ensuring at the same time that it is properly safeguarded and authorised by the service user. Furthermore, it is essential to rationalise government processes by asking why a service is delivered in a particular way and by a particular agency. Where necessary, organisation and operational change must progress in tandem with the introduction of e-government. The reason for this requirement is simple: e-government will not reach its full potential unless the process of delivering services is also re-engineered with a view to improving service delivery. This in turn involves organisation change, possible changes in staff and office locations, staff re-skilling, and improvements in IT (OECD 2002b, p. 3).

In Ireland as elsewhere, one of the obstacles to the greater internal administrative integration that e-government demands is the organisational structure of the civil and public services. From an e-government point of view, ideally what is needed are teams and structures where people and expertise come together, leaving the banner of their department or agency behind. It will be necessary to break down the walls of many organisations, departments and agencies that exist at present, so that services can be re-organised around service user needs and functional requirements of service delivery and administration. This type of e-collaboration will improve service delivery, and make work processes in service-providing agencies and departments more streamlined and rational.

When the PSB is in full operation, public services will put their information and services on the broker, so that users can access services from one location. Processing of the services will usually take place elsewhere (in the back offices, agency computer systems etc) but the customer only deals with the user interface that is straightforward and standardised. If a service requires dealing with many different agencies, that can also be accommodated; forms can be designed so that if necessary the PSB can break up the form and send the relevant parts to different agencies. (It is also important that all relevant pages on the PSB should carry a reference to the possibility to complain about any aspect of online services to a relevant body such as the Ombudsman). In this way, the existence of the PSB will in itself induce a considerable degree of change both within public service organisations and in the patterns of collaboration between them.

7.2.1 Co-ordination and leadership

While agency/department-based innovation needs to continue to be encouraged, the issue of overall co-ordination remains important with an office, department or agency taking a clear lead role in the development process. The OECD points out that as governments seek to fully capture the benefits of ICTs, implementing e-government 'will become more complex, expensive and disruptive'. As a consequence, 'continued political and senior management leadership will be required' (OECD 2002b, pp. 3-4). This is particularly important because there can be considerable resistance to the changes that are required. If the more significant gains in efficiency and service quality are to be realised through seamless (co-ordinated) services: 'leadership to motivate trailing agencies and to break down barriers to change is an essential ingredient of e-government efforts' (op. cit., p. 20).

Most countries with advanced e-government have appointed a lead agency or co-ordinator that oversees the development of e-government (the State Services Commission in New Zealand, the Office of the e-Envoy in the UK - see the international case studies), and Ireland has taken a step in this direction through the appointment of a Minister of State for e-government. Paradoxically, decentralisation of the delivery of e-government services necessitates more central co-ordination if a uniform level and standard of service is to be provided throughout the country and across the public service. In order to achieve joined-up government, joined-up e-government is necessary; a lot more co-ordination is needed to bring into closer co-operation the different initiatives that are in existence at the moment. Co-operation is necessary in order to 'avoid duplication, to ensure coherent action in a range of crucial areas such as security and privacy protection, and to provide a framework and

capacity for seamless services' (OECD 2002b, p. 22). The need for such co-operation increases greatly when more complex, transactional services are implemented.

7.2.2 Modernisation of government

The development of e-government in Ireland

> has to be seen in the wider context of the organisational and process changes arising from recent developments in the public service, including the Public Service Management Act 1997, the Freedom of Information Act, the Strategic Management Initiative, including Quality Customer Service aspects and the commitments in the Programme for Prosperity and Fairness to continued support for information society initiatives in the delivery of quality public services (Department of Finance 2000).

The business reorganisation that has to precede or accompany the introduction of e-government is by no means a straightforward task. However, IT and its e-government applications also hold out the promise of contributing to the broader process of public management reform. While the implementation of e-government is very challenging, this challenge should be seen in the light of the considerable benefits and synergies that it has for the public management reform programme; as an OECD discussion paper on the impact of e-government states, 'e-government is a tool to achieve policy goals rather than an objective for its own sake … its realisation has the potential to help governments launch some real transformations of how they do business and how they relate with citizens' (OECD 2002a, p. 3).

The OECD also predicts that pressures for the reform of public administrations will continue in the context of budgetary discipline, and the need to do more with less (OECD 2002b, p. 4). This is particularly relevant in a low-tax, low-spend system such as Ireland where the structure of the economy and of the public services are premised on low taxes, and hence the need to reduce expenditure (rather than opt for large tax increases) in a context of budgetary imbalances. It is also expected that 'e-government ways of working - involving ICTs, collaboration, public-private partnerships and customer focus - will increasingly become the norm for public administrations' (OECD 2002b, p. 4). In other words, while e-government implementation is in many ways dependent on the progress of the broader public service modernisation programme, it also has an important role in driving the modernisation agenda forward.

7.2.3 Gradual approach

The re-organisation tasks described above constitute an enormous challenge. However, it is important to note that a so-called 'think big, start small, scale fast' approach has resulted in impressive achievements in the area of e-government (for instance, ROS described above is the result of this approach) and underpins current departmental e-strategies in Ireland. In other words, the challenge of e-government can be broken down into smaller units that are relatively easily achieved within a short time-frame, and that then add up to an impressive whole (see also Accenture 2002). Each e-government service should be carefully monitored and studied as it is rolled out in order to establish what constitutes good practice in the area. This good practice should then, where appropriate, be replicated across new e-government services. Also, progress towards the goals outlined in departmental e-strategies should

be monitored and measured annually, and these progress reports should be included in business plans.

7.2.4 Industrial relations

While the processes of re-engineering and staff up-skilling have extensive implications for employees, these implications are positive for the most part. In order to reap the full benefits of IT and e-government, routine decision making by government agencies should be automated. Simultaneously, it should be possible to detect unusual or problematic cases that can then be singled out for separate assessment. In this way, there should be less need for public servants to perform mundane routine operations such as data entry and more opportunities to concentrate on the more interesting work tasks (Considine 2001). Training of public sector employees and managers must cover not only ICTs but also the broader organisational dimensions of e-government (Heeks 2001, p.173). In addition to technological know-how, employees must also be capable of co-operating within a network of departments and agencies delivering e-government services. While processes are made more automatic, it should still be possible for service users to make a contact or make a complaint to a person.

The more customer-focused service delivery processes that e-government calls for obviously 'require union agreements to new ways of organising and structuring work' (Department of Finance 2002). Among the issues that need to be addressed are staff deployment in the new working arrangements; new managerial roles; centralisation of shared services; decentralisation of service delivery among multiple organisations; outsourcing or part outsourcing; ownership, decision making and accountability issues; re-allocation of resources freed up by more efficient processes and re-skilling for new purposes; and possible new incentive schemes for individual performance achievement (op. cit.).

7.2.5 Policy making and internal administration

E-government to date has been very much focused on the delivery of services, because it is the easiest way to produce tangible results such as shorter queues and processing times. However, as was pointed out in Chapter 2, government operates on three different levels, at the service delivery, policy and internal administration levels. It is clear that most e-government applications to date have focused on service delivery to citizens and entities such as businesses, while the potential of e-government to improve internal administration and policy making has not been fulfilled. While the delivery of e-government services is obviously desirable, the multiplicity of public sector agencies and organisations and the large number of services they deliver call for greater integration of administrative processes and policy making.

E-government and effective use of ICTs can enhance policy making in many different ways. ICTs and e-government enable fast and regular collection of information which in turn can be used to track social changes and developments, evaluate programmes and in this way improve the effectiveness of government. For instance, greater and more effective use of ICTs and online services would make it possible to collect more data on the population's health status, access to government services, nature of unemployment, and so on.

The new possibilities of more effective and faster communication allow people from different parts of the public service to work together in formulating policies. ICTs can make more meaningful the links between people who deliver services and those who make policies. E-government enables the seamless transfer of information from customer service staff to planning staff, and all the way up to the highest decision-making level. The possibilities of e-government in this process of providing feedback with the intention of shaping policies are considerable. A wide variety of groups and individuals, such as interest groups and specialists, could also be linked up to the policy process with the help of ICTs, enabling online consultation on policy issues and virtual policy-making communities. With the help of the appropriate technology and knowledge environments/knowledge management, it will be possible to create virtual organisations that can respond to crises such as the foot and mouth crisis almost instantly.

The same applies to the internal administrative processes. Often, agencies and departments are engaged in similar initiatives, 'reinventing the wheel', or simply have common processes that it would be more efficient to carry out centrally. For instance, the accounting facility for paying travel expenses of civil servants could be computerised and shared between departments (common forms obtainable online, filled online, processed automatically, paid into bank accounts). E-government should enable public servants to aggregate data so that it is instantly at one's fingertips e.g. for producing management reports. This would obviously be a major rationalisation of process and data management within the public service and therefore would lead to great financial savings and efficiency gains, particularly when it comes to large-scale annual exercises such as the Estimates process. There is a great need to put in place Intranets across the public service that would enable more effective internal communications and information-sharing.

7.3 Access to e-government

While e-government has considerable potential to bring services closer to people and to improve the quality of their transactions with the public service providers, it also poses the risk of excluding certain groups of people. There are a number of different, but in practice interconnected, reasons for exclusion from e-government services. The two main reasons are lack of physical access and limited technological skills. It is also important that e-government services for both citizens and businesses are actively publicised and promoted, in order to maximise the number of potential users that are aware of the services.

7.3.1 Multi-channel service delivery

In a number of countries (e.g. Canada and Australia) the problem of 'e-exclusion' has been tackled by combining e-government with other, more traditional channels of service delivery (see Chapter 3). In practice, this means that services are accessible electronically for those who want to use e-government services, but also over the phone, or in person, for those who are not comfortable with or cannot use e-government services. From the service users' point of view, it certainly makes sense to break the organisational boundaries at the front end so that the service delivery interfaces, whether electronic or conventional, increasingly resemble the one-stop-shop model.

E-government information systems do not have to deliver information directly to the client/end user, but can also act as an interface to the intermediary (administrator, information officer etc) who uses it as a reference tool to access information while interacting with the client (Intelogue 2002, p.3). In other words, a 'broker' or an advice centre acts as an intermediary between the source of information and the client. This is the model that is used for instance in the CareDirect telephone/in-person service and the NHSDirect telephone service in the UK. The case study of ISCs in Donegal also illustrates the potential of this model (see Chapter 6). These are good examples of how 'human-based expertise goes hand in hand with IT solutions' (Intelogue 2002, p.4). The broker-interface-client solution is particularly effective for groups such as older people who cannot always immediately articulate their needs.

Services differ in the extent to which they are suited for the e-environment. In the case of some services, it makes sense to put them completely on the Internet (e.g. motor tax) whereas many more complex interactions in the social services and health care functions cannot be put completely on the web as service users need closer interaction with the service and its providers. We also need more experience of cross-agency work in providing e-government services. It often makes sense to break the organisational and agency boundaries at the front-end (i.e. at the service delivery interface in the form of one-stop-shops).

In Ireland, the focus is on multi-channel service delivery, i.e. retaining traditional service delivery modes in tandem with developing e-services. However, this approach is not without its challenges. It necessitates the translation of old forms of communication (such as letters) into an electronic format as early in the administrative process as possible (and then the translation back into letter form if necessary). Some policy makers interviewed for this study expressed the view that citizens have the obligation not to waste other people's money and that they should therefore be 'morally obliged' to choose the least costly service delivery option (e-government services). This is a challenge to those who design and make the technology; designing it so that as many as possible can use it. Developments in mobile phone technology and Java fonts may make technology a lot more ubiquitous and cheaper to use, thus enabling more people to use ICTs to access e-services, both from the private and public sectors (the term sometimes applied to this is ubiquitous, or u-commerce - see Accenture 2002). Online payment options must also be designed to facilitate as many users as possible (e.g. accepting both debit and credit cards).

There is a risk that e-government may offer premium services at a higher speed to a select group of people while others are left in the old-fashioned, slower service delivery mode. The potential of public facilities such as libraries and citizens' information centres to offer Internet access should be fully utilised, and the role of librarians, information workers and others could also be broadened so that they could act as advisors in this area.

It remains to be seen how feasible the multi-channel approach will be in the future. Providing both e-services and conventional services clearly has resource and industrial relations implications. In the multi-channel model, staff have to work with two very different types of clients and technologies, and running both channels in parallel is more costly than operating the e-government channel alone.

7.3.2 ICT access among service providers

On the service provider side, there are also access problems and technical shortcomings. For instance, only some 40 per cent of GPs have PCs, and the IT systems within the civil and public services are so disparate that co-ordinating them is a huge task. Much more investment is therefore needed, also in places such as schools that prepare people to use computers.

7.3.3 Strategies for tackling exclusion

In tackling exclusion from e-government services, a number of strategies can be adopted.

- Improving computer literacy levels: this can be done through computer literacy training in primary schools, community centres, workplaces etc.
- Making e-government services easy to use for those who have little or no computer skills: for instance, touch-screen technology is suitable for people who do not normally deal with computers. Telephone applications such as the forthcoming government VPN (virtual private network) in Ireland will also open up e-government to a wider cross-section of the population.
- Making computer and e-government services available (ideally free of cost) in public places such as schools, shopping centres, hospitals and one-stop-shops.
- Ensuring that e-government services comply with highest international standards in regard to the needs of people with disabilities.

From the outset of this research project, the research team was conscious of the need to define not only what e-government is, but also what it is not. E-government has become such a popular and all-embracing concept that it is important to realise that it is not a panacea providing solutions to all the challenges of public service delivery. The key policy makers and e-government actors interviewed for this study confirmed our concern to acknowledge the limitations of e-government, highlighting the services and customer groups (including both individual citizens and businesses/organisations) that are not easily transferred to the e-service environment.

7.3.4 The role of local services and local government in ensuring access

E-government has both centralising and decentralising tendencies. The main strength of local authorities and local service delivery agencies is that they are well placed for communicating with citizens, for receiving feedback and for delivering services in a genuinely interactive manner. The potential for local politicians and service delivery staff to influence policy would also be enhanced by creative use of ICTs, facilitating virtual organisations where people can have roles both at the central and local levels. E-government may mean that the boundary between the local and the central will become more blurred.

It is not desirable for service users to have to avail of services in isolation - the view of public services must not be too singular, and local delivery can help to avoid this. There should be more widespread implementation of the model where multi-skilled frontline staff are supported by back-office expertise in delivering services. If staff are multi-skilled, the services that they provide can be expanded beyond the traditional local authority-provided services. However, before this point is reached, it is

important to establish the terms of engagement, i.e. to be clear about where responsibility and accountability for service provision lie.

E-government may mean that the 'local' dimension of the public sector will disappear to some extent. For instance, motor tax is being locally administered at the moment but technology facilitates centralised administration. This inherent tendency of e-government, combined with the setting up of national agencies in the area of e-government in Ireland, constitute a threat to the 'local' dimension of public services. However, technology could be harnessed to be used in a different way, i.e. so that it is used to push services into the communities and to anchor services in small localities.

7.3.5 The Ennis Information Age Town

The most recent comprehensive survey of the 'Ennis experiment' was carried out in June 2001 (Ennis Evaluation Report 2001). This survey was designed to establish levels of ownership and usage of PCs and the Internet in Ennis town and its suburbs. Its main aim was to assess the impact of an initiative in which all households in the area were offered a subsidised PC. The survey established that 79 per cent of homes in the area had qualified for the subsidised computer scheme, and that 85 per cent of those eligible took advantage of the scheme. Those who did not take up the offer of a computer were not interested (38 per cent), already had a computer (19 per cent) or were concerned about running costs (13 per cent).

The survey established that households where the head of household was from a professional or white-collar background were more likely to qualify than those from working class backgrounds. However, in addition to having a lower level of awareness of qualifying in the first place, people from unskilled working class backgrounds were more likely to have turned down the offer. The reasons for this have not been analysed. It also appears that there was no conscious attempt or special measures taken to 'redistribute' PC ownership.

Nevertheless, levels of PC and Internet access in Ennis are more than twice the national average. Seventy-five per cent of households have a PC, 57 per cent have an Internet connection and 53 per cent have an e-mail address. Household ownership of PCs is about 80 per cent higher than in Dublin and the mid-East, the two most developed areas in Ireland (using the Quarterly National Household Survey for Sept-Nov 2000 as the benchmark). National survey data also suggests that 63 per cent of homes with a PC are connected to the Internet. In Ennis this rate is 76 per cent. Combined with the difference in household ownership of PCs, this means that the proportion of households with an Internet connection in Ennis is significantly higher than the national average. Computer skill levels in Ennis are very high in the light of most benchmarks. The survey established that those with third-level education tend to have taken more advanced courses. People in Ennis are also significantly ahead of national and international benchmarks in the frequency of Internet use. This would seem to suggest that one of the main aims of the Information Age Town project has been achieved.

The survey concludes that level of education and social class are major determinants of the frequency of PC use. It was also established that teens and sub-teens are heavier home users of PCs than their adult counterparts. Men are slightly heavier users than women. On the whole, it appears that the Information Age Town project did make a

difference, the levels of ownership and use of computers/Internet connection are clearly above the national average. However, the project was not able to eliminate all problems of unequal access, for instance, males with third level education are the heaviest user group.

7.4 Confidence in e-government

E-government services must be high quality, easy to use, secure and easily accessible if people are to be persuaded to use them instead of conventional services.

7.4.1 Privacy and security

To guard against the risk of inappropriate use of personal information, governments must review and, where necessary, strengthen legislation protecting people's privacy. It is also important to introduce safeguards around the sharing of personal information among government agencies (Government of New Zealand 2000, p. 3).

To quote from the Data Protection Commissioner's Annual Report for 2000

> e-government, if it succeeds in becoming established as a modern, efficient and routine way of dealing with citizens, will do so on the basis of public credibility. Reassurances regarding privacy and respect for the rights of the individual will be needed … This is precisely the kind of reassurance that data protection is there to provide, and it is in this sense that data protection is to be seen as an enabler and facilitator of … e-government.

In other words, data protection is not a barrier to e-government, but rather a key enabler of both e-government and e-commerce. Nothing in the planned structure of the Irish PSB runs counter to effective data protection, as long as service users consent to being part of that structure. In all e-government services, the user must authorise any use or sharing of his/her data. Naturally, the state must lay down some conditions for service delivery online, but it must be up to the users to consent to the use of their personal information.

It is vital for the success of e-government initiatives that they can guarantee the privacy of personal data and the security of electronic transactions, and electronic payments in particular (Bannister and Lalor 2001, pp.15-28). People will not opt for e-government services if the privacy and security of their data and transactions cannot be guaranteed, and they will opt out of e-government services if they prove unreliable in protecting user data. As a result, investing in the best available privacy and security equipment and procedures is worthwhile, because lack of them could lead to the collapse of the whole e-government project. In enabling more streamlined e-government, a national identifier would be an advantage, as long as it is introduced with the appropriate safeguards protecting citizens' privacy. More generally, e-government services must be of a standard that is at least as high as the standard of service delivery through traditional channels; people will only opt for e-government services if they are of similar or superior standard as other forms of service delivery.

At the moment, there is no national identifier in Ireland. The Personal Public Services Number (PPSN) is the closest thing to a national identifier but it cannot be used by the

police or the army for instance. As long as such an identifier is introduced and safeguarded properly, there are no data protection objections to it.

7.4.2 Increased engagement between citizens and the state

E-government holds some potential to remedy the increasing lack of engagement between the state and citizens; this connection could be reinvented in a different way (Nugent 2002). Technology could be used to make people more aware of the issues that concern them. For instance, ICTs could be used to enhance local democracy and give people a greater say in how money is spent in their local communities: 'consultation and informed participation can … help lead to policies that better address constituents' needs' (OECD 2002b, p. 12). Information on entitlements can open up decision making and reduce opportunities for arbitrary behaviour on the part of public servants. Systems that guide applicants through complex entitlement provisions can help reduce fears of unfair treatment by clarifying the decision-making process. Online tracking of the progress of applications can also promote openness and reduce fears of unfairness. It is clear, however, that 'new technologies do not automatically solve such long-standing problems as citizen apathy, distrust in government and competition with other pursuits for citizens' time and attention' (OECD 2002a, p. 6).

7.4.3 Consultation of user groups

Consultation of service users aims to contribute to producing policies that better address users' needs and expectations. Lack of consultation before e-government services are introduced is potentially very expensive, as there is a risk that expensive systems will be built that nobody actually wants to use. The importance of assessing demand for e-government services cannot be exaggerated, although it is sometimes necessary to take risks in introducing services. Furthermore, people will only use online services and the PSB if they feel that the service is appropriate, secure and useful.

To date, neither individual citizens, business customers, nor the organisations that represent them have been adequately consulted about e-government. Consultation before launching e-government services has been the exception rather than the rule. There is a lot of uncertainty surrounding the user-end of e-government services; we simply do not know if people are using the services, or if they are using them 'correctly'. There is a great need for continuous consultation with users in order to generate feedback, in the light of which policies and services can be modified. While many agencies, such as ROS, OASIS and BASIS, are already engaging in user satisfaction surveys and case studies, there is a need for a more systematic approach to evaluating and planning e-government. It is not sufficient that consultation with users takes place after services have been introduced. Rather, it is very important that potential service users are consulted before e-services are designed and implemented (Humphreys 2002).

If there can be consultation between frontline staff and policy makers, there should also be consultation/feedback from citizens to policy makers; where there is e-government, there should also be e-democracy. It has also been suggested that customer panels could be used in designing and evaluating e-government initiatives,

'as an effective means of focussing on customers' fundamental needs and ensuring these needs are met in mutually satisfactory ways' (Department of Finance 2002).

7.4.4 Avoiding delegation of tasks through e-government

There is a risk that using online services will be more difficult or time-consuming than using conventional services if administrative and analytical tasks are 'delegated' from the government to service users. There are already some indications that online services may have led to devolution of analytical processes from the service-delivery agency to the service users. The online service format and processes should not be replicated in the paper form where such replication could result in confusion and additional work for the users of conventional services.

7.4.5 Paying for e-government services

ICTs and e-government do have the potential to improve services even for the most disadvantaged communities (Third Global Forum 2001, p. 2). However, in order to achieve this, e-government services must be accessible and cost-neutral to the end user, i.e. the cost should be the same or lower than that of other forms of accessing services. It is important to ensure that all e-government ventures are adequately funded.

If online services turn out to be considerably cheaper than conventional service delivery, these cost savings should be passed on to service users, e.g. in the form of lower fees. It is also important to bear in mind that the cost of using the Internet was a problem/barrier for many people in the Ennis Information Age Town (i.e. it was helpful, but not enough, to provide a free PC). For this reason, cheap access to the Internet has to be guaranteed through improved infrastructure and increased competition in the area of telecommunications.

Paying for online services poses a problem for some people, as it often requires a credit card. Paying by debit card should be possible as it would include a large cross-section of the population, including those who cannot/do not want to have a credit card.

7.4.6 Making complaints

Making complaints about e-government services should be easy and free of cost, and it is also important to ensure that automated decisions can be followed up when investigating complaints. There are occasions when government departments deny any knowledge of complaints made by citizens to the Ombudsman. This problem may become exacerbated with the introduction of e-government, as there may be less records at hand as a result of online processing of claims, applications and requests (this is not certain, however, and only experience will tell). At the moment, most departments deal with paper records. With the introduction of e-government, tracking down decisions may become more difficult as there will be less paper records, or maybe records of any kind.

E-government may also have broad implications for accountability; as government structures become flatter and more network-like, it may become more difficult to identify the accountable individuals and bodies. The OECD cautions that 'the provision of online … portals can act to reduce accountability' because 'the bringing

together of information, unless managed effectively, can hide responsibility for ownership'. As a result, 'measures need to be adopted to ensure that responsibility for material can be identified, while maintaining ease of use' (OECD 2002b, p. 16). Obviously, it will not be easy to strike a balance between the protection of personal data at all costs and the public good of greater efficiency that results from information sharing.

Right from the launch of the PSB, the possibility of complaining to the Ombudsman should be made clear to citizens who use the broker and e-government services in general. Requests for reviews under the FOI Act should also be offered over the Internet.

7.5 Conclusion

The tasks outlined in this paper are by no means easy or straightforward. For e-government to be a success, it has to do no less than marry efficiency of services for the citizens, efficiency of service provision for the government, and rights for the privacy of service users. In many areas, a balance has to be struck between the social policy aspects of service delivery, efficiency and privacy. The next stage of e-government constitutes as difficult a task as any government is likely to confront in the area of public management. According to many of the key informants interviewed for this study, 'the easy tasks have now been completed'. The tasks that lie ahead are qualitatively different, and significantly more demanding, than the initial stages of the e-government process. For instance, making information available online, while an essential and complex task, is considerably easier than making services available online. Therefore, it should come as no surprise that the next steps of e-government development will take longer than the initial stages and will require long-term commitment, funding and clear policy vision, combined with persistence, to ensure that the e-government project reaches its full potential.

The proliferation of e-government initiatives and the lack of joined-up e-government mean that one of the most urgent tasks is to integrate and co-ordinate e-government in Ireland. This in turn requires clear strategic vision and leadership, and presents a major organisation development challenge for the public sector as a whole. It is essential that the Public Services Broker be made operational as soon as possible, but it also has to be recognised that the broker both presupposes and will lead to extensive organisational changes in the public sector at both local and central levels. This organisational change is necessary for successful application of e-government in improving service delivery and in making internal administration and policy making more effective. We clearly need to know a lot more about the organisation development issues and structural changes that e-government calls for and sets in motion; while the debate and discussion on these has been initiated here, there is considerable scope for future research.

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34. www.youth.gc.ca.
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38. There are different T levels: the most basic one is T1 where self-registration without any authentication is sufficient. This would normally be used in the case of services where the risk of financial loss for instance is minimal. Thus, renewing one's driving licence could be done with T1 level of authentication. However, where financial loss or other kind of injury may result from misuse of the service (and the risk posed by low-level authentication such as T1 is great), stricter authentication is needed. In these cases, there must be a multi-agency check to verify information

provided by user. Multi-agency check means that information is checked with the help of information given to e.g. Motor Taxation Office, Revenue Commissioners, Central Applications Office etc.

39. This initiative was launched by the Minister for Public Enterprise in December 2000. It is aimed at opening up the world of information technology to those who are unfamiliar with it. This is to be achieved through harnessing the experience and local knowledge of the community and voluntary sectors in ICT projects. Seventy-one projects were recommended for funding, which amounts to a total of 5 million euro between July 2001 and December 2002. The projects took place in every county in Ireland and with a wide range of groups such as rural communities, the elderly, the unemployed, the Travelling community, people with disabilities and young people at risk.

40. Note, however, that the EAS is not a 24/7 service; it is currently available 8 a.m. to 8 p.m. Monday to Friday, excluding public holidays.