



**Research Paper 09/01**

**20th September 2001**

# **E-GOVERNMENT**

This paper provides a background to the concept of e-government along with an overview of the strategic approaches to development of e-government UK-wide and in Northern Ireland.

Research Papers are compiled for the benefit of Members of the Assembly and their personal staff. Authors are available to discuss the contents of these papers with Members and their staff but cannot advise members of the general public.

## SUMMARY OF KEY POINTS

Stated simply, *'e-government is the use of technology to enhance the access to and delivery of government services to benefit citizens, business partners, and employees'*. Whilst the internet is often assumed to account for much of the 'e' in e-government, other technologies such as digital television and mobile phones have the potential to provide significant opportunities for the delivery of services electronically.

Progress in terms of e-government involves a progression from the simple provision of information electronically to full integration across government of electronic service delivery.

Some commentators argue that e-government should involve not only the electronic automation of service delivery but also a transformation of the way government does business and engages with citizens. This view, however, is not evident in the e-government strategies developed at either the UK or Northern Ireland level.

The *UK Online Strategy* and the *UK e-government Strategy* contain the following key commitments:

- 90% of low value goods and services (by volume) to be purchased by government electronically by March 2001;
- 25% of government services to be available online by 2002;
- 100% of procurement by civil central government to be tendered electronically by 2002;
- the UK to become the best environment in the world for e-commerce by 2002;
- everyone who wants it to have access to the internet by 2005; and
- 100% of government services to be available electronically by 2005.

At present there are conflicting opinions as to whether the UK will hit the headline target of 100% electronic service delivery by 2005.

In May 2001, OFMDFM published for consultation its *Corporate Strategic Framework for delivering government services electronically in Northern Ireland* (the 'CSF'). The strategic approach put forward in this document is in line with the *UK Online Strategy* and the Northern Ireland Executive's commitment to modernise government.

The CSF states that Northern Ireland will easily meet the target of a quarter of government services available electronically by 2002. However, the CSF indicates that in Northern Ireland the 100% availability target set for 2005 will relate only to 'key' services, rather than all.

Whilst the CSF makes reference to the potential use of range of electronic technologies, the primary focus is on electronic delivery via the internet. This focus presents challenges in relation to the promotion of social inclusion, as Northern Ireland has relatively low levels of internet access.

Whilst the CSF makes reference to the importance of social inclusion, it contains no firm commitments, in the form of targets, to address what has become known as the 'digital divide'.

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## 1. INTRODUCTION



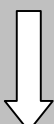
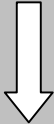
1.1 This paper provides a background to the concept of e-government and an overview of the strategic approaches to development of e-government UK-wide and in Northern Ireland.

## 2. WHAT IS E-GOVERNMENT?

2.1 Simply stated, *'e-government is the use of technology to enhance the access to and delivery of government services to benefit citizens, business partners, and employees'*.<sup>1</sup> Whilst the internet is often assumed to account for much of the 'e' in e-government, other technologies – such as digital television, mobile phones, and even games consoles – have the potential to provide significant opportunities for the electronic delivery of services.

2.2 It has been suggested that progress in terms of e-government can involve a number of stages.<sup>2</sup> As the diagram below shows, the first stage of e-government may simply involve the use of information and communication technology (ICT) to provide information. At a higher level, however, e-government may involve the use of ICT to provide integrated or seamless service delivery: see Figure 1.

**FIGURE 1 – STEPS TO E-GOVERNMENT**

	<p><b>1 INFORMATION</b></p> <p>The provision of information about government services, policies, and agencies online. One-way from government to citizen. For example: publication of Annual Report or Equality Scheme.</p>
	<p><b>2 INTERACTION</b></p> <p>Basic levels of interaction between citizen and government in the way that services operate. For example: publication of forms online; or dialogue with ministers and civil servants via e-mail.</p>
	<p><b>3 TRANSACTION</b></p> <p>Services which allow transactions of value between government and citizens. For example: filing tax returns; accessing benefit payments; or paying road tax.</p>
	<p><b>4 INTEGRATION</b></p> <p>Integrated services across government agencies and departments. For example: registration of a birth at District Council would automatically initiate payment by Child Benefit Branch of the appropriate allowance.</p>

2.3 It has been argued, however, that e-government should extend beyond integrated electronic service delivery to a '*reformulation of the very notion of Governance*'.<sup>3</sup> In this context, it has been argued that, whilst there is much government can learn from the private sector, it should be recognised that:

*The citizen's relationship with government is different to that between a customer and a business, in significant ways. The citizen shares in the ownership of government, through taxation and the franchise, and is thus a stakeholder in what governments do. In this respect, e-Government must have the potential to have a transforming effect on our democratic and political institutions.*<sup>4</sup>

2.4 Consideration of the possible impact on local government of e-government provides an illustration of what such transformation might involve:

*Whether it is call centres or internet services, authorities are being asked not to duplicate effort and not to be territorial over either the location or the management control of the service delivery. The implication is that the requirements of e-government render the current political structure of local government redundant since, if it no longer makes sense to manage or deliver services along current boundary lines, then why should it make sense to leave current structures and mechanisms of political accountability untouched?*<sup>5</sup>

#### **ADVANTAGE TO CITIZEN**

2.5 Time-saving and convenience are perceived by the public as the main advantages of electronic service delivery.<sup>6</sup> But e-government designed around the needs of the citizen or business may have other benefits, including:

- customer choice;
- simplicity; and
- inclusiveness.

#### **ADVANTAGE TO GOVERNMENT**

2.6 Recent research suggests that moving just 20% of visits to local government offices to a website could save the UK £5 billion per annum.<sup>7</sup> In addition to such efficiency savings, e-government may also allow for processes to be reviewed and improved, providing:

- more open and transparent government;
- an opportunity to redesign services to adapt to the changed needs of citizens;
- an opportunity to continually improve government; and
- more extensive consultation, improving the quality of decisions.

#### **BARRIERS TO ACHIEVING E-GOVERNMENT**

2.7 A BT research project, *e-government, Ready or Not?*<sup>8</sup> found, in July 2000, that the main barriers to e-government were:

- limited public access to the internet;
- lack of relevant skills amongst public servants;
- low levels of consumer confidence; and
- inadequate funding.

2.8 The nature of these barriers provides support for the view that, in terms of e-government, technology is the '*least of its [the Government's] worries*'.<sup>9</sup> Rather, overcoming the barriers presented by the change process itself may present the greatest challenges. These barriers include:

- the fears of individuals;
- departmental rivalries;
- the hostility of unions; and
- the sheer size of the exercise.<sup>10</sup>

### 3. E-GOVERNMENT STRATEGY IN THE UK

3.1 The *Modernising Government* White Paper of March 1999 set out the Government's long term programme for modernising government in order '*to make life better for people and businesses*'. The White Paper highlighted the opportunities offered by new technologies and contained a commitment to publish an IT strategy for 'information age government'.<sup>11</sup> This commitment was fulfilled in May 2001, when the Cabinet Office e-Government Group<sup>12</sup> published *e-government: a Strategic Framework for Public Services in the Information Age* ('the UK e-government Strategy').<sup>13</sup> Four guiding principles underlie the UK e-government Strategy: \*

- building services around citizens' choices;
- making government and its services more accessible;
- social inclusion; and
- using information better.

3.2 The UK e-government Strategy requires all public sector bodies to:

- establish new ways of doing business;
- implement common standards and framework policies;
- develop e-business strategies; and
- provide services which are accessible via government portals and other sites.

3.3 The UK e-government Strategy contains three key targets:<sup>14</sup>

- 100% of government services to be available online by 2005;
- 90% of low value goods and services (by volume) to be purchased by government electronically by March 2001;<sup>15</sup> and
- 100% of procurement by civil central government to be tendered electronically by 2002.

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\* Much of the strategy relies on the White Paper and the report *e-government: Electronic Government Services for the 21st Century*, published in September 2000 by the Performance and Innovation Unit of the Cabinet Office.

3.4 The UK e-government Strategy is one element of the broader *UK Online Strategy*. In addition to the 100% target for electronic delivery of government services by 2005, the UK Online Strategy aims to:

- make the UK the best environment in the world for e-commerce by 2002; and
- ensure that everyone who wants it has access to the internet by 2005.

3.5 Leadership is seen as crucial to successful implementation of both the UK Online Strategy and the UK Online Strategy. The Office of the e-Envoy, located in the Cabinet Office, is responsible for overseeing implementation.<sup>16</sup> In addition, an e-Minister, currently Patricia Hewitt MP (Secretary of State for Trade and Industry), promotes the strategy at Cabinet level.

3.6 A key development in relation to both the UK Online Strategy and the UK Online Strategy, was the launch of the *UKonline* website<sup>17</sup> in December 2000. The site is a portal\* where citizens can interact and transact with government online and where, eventually, they may become involved in extensive policy consultations. The portal arranges service delivery around 'life episodes' such as looking for work or having a baby, rather than on a departmental basis.

## **PROGRESS**

3.7 The Annual Report of e-Minister and e-Envoy<sup>18</sup> published in September 2000 reported that in July 2000, a Cabinet Office survey showed that 33% of government services were now available online, with current plans projected to get 71% online by 2002. The report also noted that progress on e-government in the UK compared favourably with that in other G7 nations, and that the UK was on target to meet the 2005 commitment for 100% electronic service delivery.

3.8 It has been suggested, however, that, whilst the government will indeed hit its 2005 targets, it may *'fall far short of "joined-up government" electronically for some time after that'*.<sup>19</sup>

3.9 There is also evidence that the Government may not reach the 100% electronic service delivery target by 2005 at all.<sup>20</sup> Research carried out between March and May 2000 reveals that confidence in reaching the target is not shared outside of Whitehall:<sup>21</sup>

*While more than three quarters (77%) of those leading on ICT strategy in Whitehall say they are confident they will reach the target, confidence falls away sharply among those at the coal face. Only a quarter in both health and local government say they are confident (26% and 27% are confident respectively). Most are not.*<sup>22</sup>

3.10 In terms of the physical infrastructure needed to facilitate e-government, according to the Organisation for Economic Cooperation and Development,<sup>23</sup> Britain lags well behind the rest of Europe, Asia and the US for high-speed internet connections.

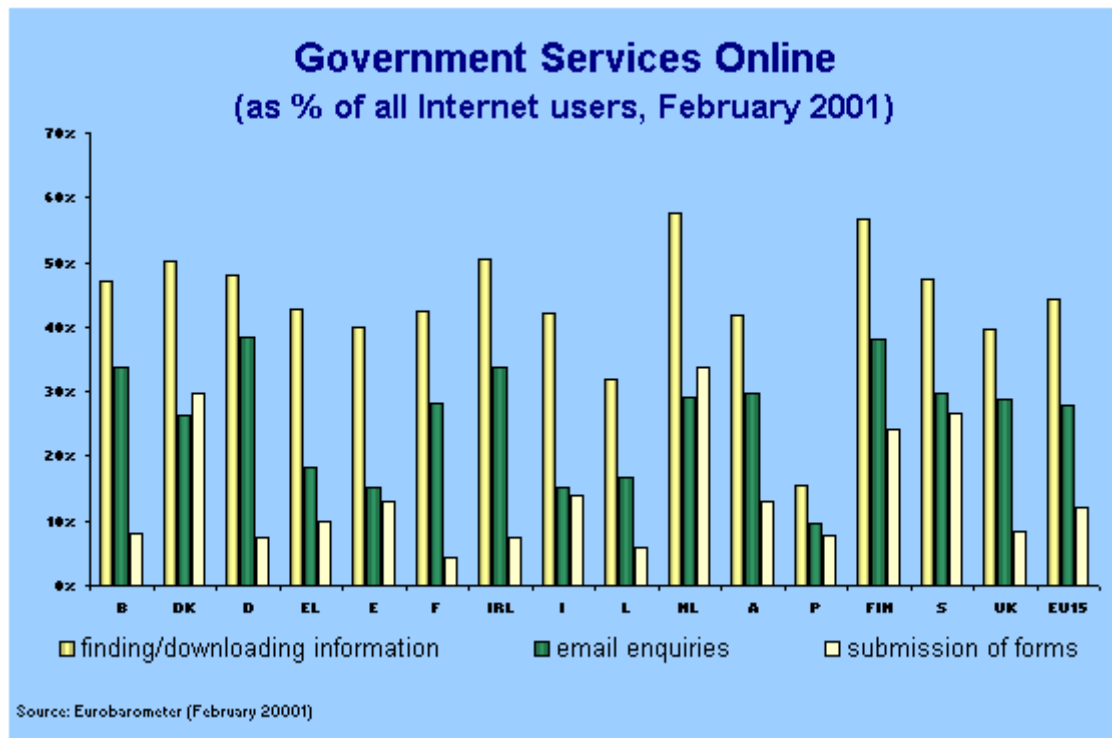
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\* A portal is a web page which aims to provide an integrated (joined up) means of access to information and services. Portals typically provide large catalogues of other sites, powerful search engines for locating information, and e-mail facilities or other Web services.

3.11 Furthermore, whilst overall in the UK access to the internet is around the EU average, European Commission benchmarking data<sup>24</sup> reveals that the UK has relatively low levels of publicly available internet access.

3.12 The benchmarking data also reveals that the percentage of citizens in the UK using the internet to interact with government, rather than simply to retrieve information, is below the European Union average: see Figure 2.

FIGURE 2 – EU MEMBER STATES' GOVERNMENT SERVICES ONLINE



3.13 Concern that development of e-government in the UK has been at too low a level was expressed by Margaret Moran MP in December 2000, when she suggested that:

*The government has made a good start on harnessing the internet to tell the world what a good job it's doing. Now it really must focus on ways in which the web can empower ordinary people and make them part of the democratic process.*<sup>25</sup>

3.14 The *Citizen Space* area<sup>26</sup> of the UKonline website may, to some extent, address this issue. The *Citizen Space* area, is designed to provide a single area where people can find out about current issues and contribute to the formulation of policies on which the public are being invited to have their say.



#### **4. E-GOVERNMENT IN NORTHERN IRELAND**

4.1 OFMDFM has recently published for consultation its *Corporate Strategic Framework for delivering government services electronically in Northern Ireland* ('the CSF'), which sets out a strategic vision for e-government in Northern Ireland.<sup>27</sup> To some extent, the CSF developed from the work of the Information Age Initiative.

##### **THE INFORMATION AGE INITIATIVE**

4.2 In September 1999, the Department of Enterprise, Trade and Investment established the Information Age Initiative ('the IAI'). The key focus of the IAI was the development of both a sound basis for e-commerce, and an ICT environment to support a knowledge-based economy in Northern Ireland.

4.3 In April 2000, the IAI launched *Leapfrog to the Information Age - Strategic Framework and Action Plan* ('the Leapfrog strategy').<sup>28</sup> This document set out three key priorities '*to help achieve the vision of a highly attractive, dynamic and supportive knowledge-based economy in Northern Ireland*'.

- use of ICT by all businesses and organisations in Northern Ireland;
- rapid development of the ICT sector in Northern Ireland; and
- enhancement of an environment supporting the knowledge economy.

4.4 Whilst the Leapfrog strategy was focused on the business environment, the IAI did recommend the establishment within government of an interdepartmental body to:

*consider the wider Information Age issues for Government including social inclusion and the delivery of services over the internet so that Government can be an exemplar organisation in this area.*

4.5 In early 2000, in line with this recommendation, OFMDFM's Central Information Technology Unit for Northern Ireland ('CITU(NI)') established the e-Government Project Board. This project board is representative of all government departments in Northern Ireland and exists

*to develop an over-arching framework and to agree associated programmes which address appropriate aspects for the integration of information and communications technologies to deliver public services in Northern Ireland and to oversee their implementation.*

##### **THE CENTRAL INFORMATION TECHNOLOGY UNIT FOR NORTHERN IRELAND**

4.6 The CITU(NI) was formed in 1997 and is now located in OFMDFM. In line with the broad focus of e-government and commitments contained in Section 7 of the Programme for Government, it has four objectives:

- to develop strategy and policy for the use of ICT in the NICS and take forward initiatives for electronic service delivery;

- to provide leadership and guidance to the departments and the wider public sector;
- to provide assurance to departments and the public that appropriate action is taken to make IT systems secure and robust; and
- to foster links with the private sector and local universities.

4.7 In June 2001, CITU(NI) published for consultation *The Corporate Strategic Framework for delivering government services electronically in Northern Ireland*, which had been developed by the e-Government Project Board. No detail has been provided about the extent or closing date of the consultation.

#### **THE CORPORATE STRATEGIC FRAMEWORK**

4.8 The CSF is largely consistent with the UK Online Strategy and the commitment contained within the Northern Ireland Executive's Programme for Government to modernise government by developing:

*the actions in our Corporate Strategic Framework for e-government which will provide the foundation to co-ordinate the delivery of government services electronically and help to address key issues such as social inclusion and freedom of information.*<sup>29</sup>

4.9 The CSF will apply to the entire NI public sector. It is intended to provide the basis for building electronic government services within Northern Ireland, whilst ensuring consistency and integration with other initiatives in the UK and the Republic of Ireland. The vision contained within the CSF is of 'a modernised, efficient government, alive to the latest developments in e-business, and meeting the needs of citizens and businesses in Northern Ireland'.

4.10 Four fundamental principles underlie the CSF

- **Choice** – *The customer chooses which access method to use.*
- **Convenience** – *The customer decides when and where to interface with government.*
- **Simplicity** – *People should not need to understand how government is organised, or to know which Department or Agency does what, or whether a function is exercised by central or local government. Services should be organised around how people live their lives including, for example, life episodes such as the birth of a baby, travelling abroad or moving house.*
- **Inclusiveness** – *New services should be developed so that they are available to all and easy to use. This means making it easier for anyone who wants to, to get access to electronic services, including those in minority language groups and those with disability or limited mobility.*

4.11 The CSF envisages the use of ICT to address the following four key aspects of providing government services electronically:

- **Connecting the Citizen and Businesses** – *ensuring that citizens and businesses have the means and confidence to access and use modern ICT services, either on their own or via intermediaries;*
- **Connecting with the Citizen or Business** – *improving the way in which government interacts with its customers, and meets their needs;*

- **Effective Government** – *improving the way in which government provides services – ‘joined up government’; and*
- **Efficient Government** – *improving government’s efficiency through the effective use of ICT.*<sup>30</sup>

4.12 A website portal for NI, – *onlineNI* – is under development. The portal is intended to provide equivalent services to the UKonline website.

## **TARGETS**

4.13 The CSF states that NI Departments will easily meet the Prime Minister's target of making 25% of government services available electronically by 2002.<sup>31</sup> The CSF contains one other target for NI: *‘all key services being available on-line by 2005’.*<sup>32</sup> The CSF commitment is to make 100% of key services, rather than all services, available electronically by 2005. This differs from the UK e-government Strategy target, which is for 100% of all services to be available electronically by the same date.

4.14 Whilst the CSF recognises that *‘there is a particular responsibility on Government to ensure that anyone who wants to can have access to electronic services’*,<sup>33</sup> it contains no commitment to hitting the UK Government's target of internet access (whether at home, at work, or in library) for everyone who wants it by 2005.

4.15 The problem of access may be more acute in Northern Ireland than in the rest of the UK, due to the relatively low uptake of internet access.<sup>34</sup>

4.16 However, low levels of uptake are not necessarily due to lack of availability, and one commentator has noted that

*even if the government were to subsidise free PCs for everyone – and no one is seriously suggesting that this would ever happen – there would still be many millions of people too intimidated by technology to make sensible use of them.*<sup>35</sup>

4.17 On the issue of social inclusion, the CSF states that:

*new services should be developed so that they are available to all and easy to use. This means making it easier for anyone who wants to, to get access to electronic services, including those in minority language groups and those with disability or limited mobility.*<sup>36</sup>

4.18 The CSF's focus on the internet may present challenges in this respect. The Hansard Society Report on New Media and Social Inclusion<sup>37</sup> has drawn attention to a number of factors which can exclude people from using the internet. These factors include the internet's:

- text-based format, which requires high levels of literacy;
- monolingualism (mainly American English);
- failure to cater for certain disabilities; and
- poor design.

4.19 Whilst the CSF recognises that there is an issue relating to the use of ICT and social inclusion, it contains no firm commitments on this issue and makes no reference to internationally accepted standards of accessibility to the internet.<sup>38</sup>

#### **EFFICIENCY AND EFFECTIVENESS**

4.20 One of the perceived benefits to government of electronic service delivery is the opportunity it affords to achieve efficiency savings. In this respect, however, the CSF states that:

*Traditional forms of service will not be replaced by these electronic services; both service delivery mechanisms will run, of necessity, in parallel. Therefore, while these services will result in significant quality improvement, there may not be any cost savings, at least in the short term.*<sup>39</sup>

4.21 Whilst e-government is clearly about improving efficiency and quality, it has also been suggested that it extends further to the 're-engineering' of services. Given that traditional forms will run in parallel with electronic services, it is not clear to what extent the CSF will lead to significant reorganisation of the way services are delivered. Such a lack of reorganisation may impact outside of the public sector. Janet Caldwell, Director of IBM's Institute for Electronic Government, has highlighted what she sees as the danger for government and more widely in adopting a narrow view as to what e-government involves:

*Leaders who define e-government in a narrow sense -- simply moving services online -- miss larger opportunities which will determine competitive advantage in the long run ... governments today have no choice but to aggressively pursue an all-encompassing shift from traditional to online service delivery. To do otherwise places them in jeopardy of falling below minimally acceptable standards of service ... A broader grasp of e-government is imperative for leaders to position their governments, citizens, businesses and communities for sustainable strategic advantage.*<sup>40</sup>

4.22 It has been argued too that, beyond significant shifts to online service delivery, the potential exists for e-government to have a transforming effect on democratic and political institutions. The CSF is clearly not a framework for such a broader view of e-government, as nowhere does it link electronic service delivery to such wider change. In this context, the scope of the CSF appears similar to that of the UK e-government Strategy, which has been criticised for offering:

*little understanding of the various ways that electronic service delivery ... might impact on the relationship between citizen and state, beyond the way in which that delivery might be organised.*<sup>41</sup>

- <sup>1</sup> Silcock, S (2001) *What is e-government?* Parliamentary Affairs 54: 88-101, (at page 88)
- <sup>2</sup> For example, in OFMDFM (2001) Corporate Strategic Framework for Delivery Government Services Electronically in Northern Ireland
- <sup>3</sup> Steadman Jones, D, and Crowe, B (2001) *Transformation not Automation, the e-government challenge* Demos, London, page 17
- <sup>4</sup> *Transformation not Automation* pages 17-18
- <sup>5</sup> Kearns, I (2001) The Parliamentary Monitor – IT Briefing – May 2001 page 8
- <sup>6</sup> MORI and the Henley Centre (2000) *eGovernment – Ready or not?* available at [http://www.egovernment.bt.com/egov\\_report/index.html](http://www.egovernment.bt.com/egov_report/index.html)
- <sup>7</sup> Lowe, C (2001) *Can government survive the internet?* available at [http://www.egovernment.bt.com/reports\\_articles/survive.htm](http://www.egovernment.bt.com/reports_articles/survive.htm)
- <sup>8</sup> MORI and the Henley Centre (2000) *eGovernment – Ready or not?* available at [http://www.egovernment.bt.com/egov\\_report/index.html](http://www.egovernment.bt.com/egov_report/index.html)
- <sup>9</sup> *What is e-government?* Page 88
- <sup>10</sup> *What is e-government?* Page 88
- <sup>11</sup> <http://www.official-documents.co.uk/document/cm43/4310/4310.htm>
- <sup>12</sup> Established in 1995 as the UK Central IT Unit
- <sup>13</sup> <http://www.citu.gov.uk/ukonline/strategy.htm>
- <sup>14</sup> <http://www.citu.gov.uk/ukonline/progress/anrep1/045.htm>
- <sup>15</sup> The most recent report on this target estimates that in January to March 2001, government departments conducted only approximately 50% of low value transactions electronically: see [http://www.citu.gov.uk/ukonline/progress/actplan/rec12\\_2.htm](http://www.citu.gov.uk/ukonline/progress/actplan/rec12_2.htm)
- <sup>16</sup> Published in the first UK Online Annual Report (2000), Cabinet Office, at <http://www.citu.gov.uk/ukonline/progress/anrep1/default.htm>
- <sup>17</sup> <http://www.ukonline.gov.uk>
- <sup>18</sup> [http://www.citu.gov.uk/ukonline/ukonline\\_menu.htm#annualreport](http://www.citu.gov.uk/ukonline/ukonline_menu.htm#annualreport)
- <sup>19</sup> [http://cipfa.org.uk/publicfinance/features\\_details.ihtml?news\\_id=7314](http://cipfa.org.uk/publicfinance/features_details.ihtml?news_id=7314)
- <sup>20</sup> See also *Government's internet project 'doomed to fail'*, 4 June 2001, Guardian, <http://www.guardian.co.uk/Archive/Article/0,4273,4197663,00.html>
- <sup>21</sup> *e.Government – Ready or not?* at <http://www.egovernment.bt.com/summaries/sum05.html>
- <sup>22</sup> *eGovernment – Ready or not?*
- <sup>23</sup> *Missing the high speed revolution*, 31 May 2001, Guardian, <http://www.guardian.co.uk/online/story/0,3605,498583,00.html>
- <sup>24</sup> [http://europa.eu.int/information\\_society/eeurope/benchmarking/list/2001/index\\_en.htm](http://europa.eu.int/information_society/eeurope/benchmarking/list/2001/index_en.htm)
- <sup>25</sup> The Parliamentary Monitor – IT Briefing – Dec/Jan 2000/01
- <sup>26</sup> <http://www.ukonline.gov.uk/online/citizenspace/default.asp>
- <sup>27</sup> OFMDFM (2001) Corporate Strategic Framework for Delivery Government Services Electronically in Northern Ireland, <http://www.cituni.gov.uk/consultation/index.htm>
- <sup>28</sup> <http://www.leapfrog.gov.uk/publications/chp5.pdf>
- <sup>29</sup> Northern Ireland Executive Committee (2000) Programme for Government, para 7.2
- <sup>30</sup> Corporate Strategic Framework, para 1.6
- <sup>31</sup> Corporate Strategic Framework, page 13
- <sup>32</sup> Corporate Strategic Framework, page 4
- <sup>33</sup> Corporate Strategic Framework, para 3.2 (i)
- <sup>34</sup> <http://www.statistics.gov.uk/pdfrdir/int0601.pdf>
- <sup>35</sup> Gray, R. (2001) *Bridging the Digital Divide* Community Care, 21 Dec 2000 – 3<sup>rd</sup> Jan 2001: 2-3
- <sup>36</sup> Corporate Strategic Framework, para 1.6
- <sup>37</sup> Coleman, S and Emilie, N (July 2000) *New Media and Social Inclusion*. London: Hansard Society
- <sup>38</sup> Such as the Web Accessibility Initiative's *Web Content Accessibility Guidelines*, at <http://www.w3.org/WAI/>
- <sup>39</sup> Corporate Strategic Framework for Delivery Government Services Electronically in Northern Ireland page 4
- <sup>40</sup> Caldwell, J (2001) *Seven E-Government Leadership Milestones*, Institute for Electronic Government, IBM, available at <http://www.ieg.ibm.com>
- <sup>41</sup> *Transformation not Automation, the e-government challenge* page 17