



government on the web

a report by the comptroller and auditor general

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part four

the co-ordination of Government on the Web

4.1 Management and budgetary responsibilities for most Web sites provision and most intranets rests essentially with departments, agencies and non-departmental bodies. Very little Web-related spending is made centrally within government as a whole. Ministerial responsibility for departmental administration was widely cited in our interviews as an important influence on the strong differentiation of departmental Web sites from each other, and on the variable progress of intranets. One manager assured us in an interview that his agency's site had remained largely unchanged for two years because he could not alter a single page without ministerial permission. Nonetheless, we showed in Part I that the advent of the Internet and World Wide Web challenges all agencies to reconsider how they communicate with citizens and organise their business processes. Because of the pace of technological and social change in this area, aided by ministers' emphasis on joined up government, civil servants and public officials are now looking to central agencies for more guidance and help in formulating their Web and intranet policies. In addition, *Modernising Government* recognises that achieving 'information age government' raises corporate issues for Whitehall as a whole, and indeed the public sector as whole. Major changes in **ICTs** require substantial and co-ordinated investments across programmes and departments. And public officials have frequently learnt (and then relearned) difficult and sometimes costly lessons in implementing ICT changes. Central agencies have a strategic interest in controlling the adoption of new technologies so as to minimise mistakes and to foster the most rapid learning from experience possible.

4.2 These contradictory impulses - towards devolving power to departments and agencies, or recentralising controls at the heart of government - have led to differing patterns of control at various times. In the late 1970s ICT policy was relatively centralised, and linked with an industrial strategy of favouring British 'national champions' in the IT area. In the 1980s the balance swung back towards the departments controlling their own IT procurement, and the Treasury's central control mechanisms over IT were largely dismantled. The creation of Next Steps agencies led to further devolution of control over large computerised systems to the executive agencies directly operating them (except in the DSS, where control was centralised across the department in ITSA). Now the development of the Web and the Internet raise conflicting issues about controls within departments and agencies, as business units and content providers set more ICT policy,

rather than specialist IT staffs (see paragraph 1.38). In this Part we look first at the range of central agencies involved in government on the Web issues; and then at overall performance on the 25 per cent electronic transactions target across central government.

The role of Central Agencies

4.3 One key agency with responsibilities for co-ordinating the development of modern public services is the **Cabinet Office**. The department has just over 1,600 staff, and running costs of £200 million. Its brief includes organising the Cabinet committee system and ensuring that decisions are minuted and implemented; supporting ministers with government-wide briefs and the Cabinet Secretary in his role as head of the civil service; and undertaking a range of trans-departmental roles to facilitate better government (often in collaboration with the Treasury). Until recently the Cabinet Office was divided into two parts, with a strong separation between the Cabinet secretariat and the Office of Public Services (OPS), which included a range of different offices with trans-departmental briefs and responsibilities. In January 1998 OPS was abolished as a separate body and reabsorbed into the Cabinet Office, following a report by the Cabinet Secretary, approved by the Prime Minister, which identified a need for a stronger central agency promoting good practice and government modernisation on a broad front. A second Permanent Secretary post was retained in the Cabinet Office to co-ordinate work on public service delivery, civil service management matters, and information and organisational issues, and this group includes divisions charged with modernising government and the public services, and with policy and innovation issues.

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What more might be done

A new Centre for Policy and Management Studies began work in mid-1999 under the Cabinet Office to develop research and training programmes orientated to promoting innovation across central government. The most important statement of government's overall policy is the *Modernising Government* white paper, issued in March 1999 by the Cabinet Office, with an introductory letter from the Prime Minister. It identifies the key principles of modernisation as being the promotion of a joined-up approach to policy issues; adopting a user-focused approach; developing an excellent quality of service for citizens and customers; and promoting the greater use of ICTs and 'information age government'.

4.4 Within the Cabinet Office there is a small policy unit of 29 staff (of whom 12 are policy-level staff) called the **Central Information Technology Unit (CITU)**. First established in 1996 CITU has remained a small body, and in 1998-99 had a budget of £4.7 million a year, much of it spent on commissioned research and support of some general, government interest initiatives. CITU produced the green paper *Government Direct: A Prospectus for the Electronic Delivery of Government Services* in late 1996. It examined a range of possible developments to make services 'more accessible, more convenient, easier to use, quicker in response and less costly to the taxpayer'. The emphasis was mainly on the use of smart cards by citizens to allow them to interact with government, much as bank customers have been able to do with banks in managing their accounts and withdrawing cash. The *Government Direct* paper also paid exclusive attention to citizens accomplishing transactions with government, rather than simply seeking information. At this point the published text put little emphasis upon 'joining up' government, and the Internet and the Web did not feature in a major way in the document. When ministerial thinking changed after the election, CITU developed one of the four work strands leading up to the *Modernising Government* white paper, dealing with 'information age government'. CITU commissioned extensive research (including large-scale surveys and focus groups) from the survey company BMRB on how citizens viewed a wide range of mechanisms for interacting with government agencies, including touch-tone phones, digital TV, electronic kiosks and PCs. The results were published in Autumn 1998 as *Electronic Government: The View from the Queue* and widely circulated within government. Again the focus was firmly on transactions or dealings with government, and the document tried to determine from the survey and focus group responses what the potential was for electronic transactions to develop, and which electronic mechanisms would be most or least popular.

4.5 There were further developments in CITU's strategy towards government on the Web from Autumn 1998. The Unit commissioned the Web private sector consultancy Cyberia to undertake focus group work on *Government Web Sites and the Delivery of Public Services*. They found that the existing pattern of sites was confusing for many users, with a jungle of different styles for navigating sites and information organised

more in line with insider knowledge than citizens' needs. In January 1999 CITU created a Government on the Internet working group including representatives from four central departments and agencies, three other Whitehall departments, the Local Government Association, the National Health Service, the Communications Unit in 10 Downing Street, Cyberia staff, and with a Cabinet Office secretary. The group began work on two main projects, producing a set of 'Guidelines on Government Websites' designed to bring more order and coherence to departments' and agencies' sites and to make them more usable as a whole by citizens: these recommendations were publicised in October 1999. They also considered the case for relaunching CCTA's **open.gov.uk** site in a new format (see paragraph 4.12).

4.6 CITU's ability to influence departments' and agencies' policies is limited because the unit has only a small development budget of £3 million annually, concentrated in recent years mainly on commissioning research and on setting up the Government Secure Intranet (GSI). CITU also provides £60,000 for the security and maintenance of the **open.gov.uk** site. Both GSI and the Web site are run by another agency, CCTA, and are discussed below. CITU have very few policy-level staff and concentrate on trying to spot future trends, bring together information on good practice from across government, commission small amounts of research, and organise conferences, meetings and other forms of dissemination across the civil service. But the Unit has never seen itself as having any kind of regulatory role, and is not resourced to monitor trends in government Web sites or intranets in any systematic way. When CITU was asked to collate data on the 25 per cent target, they decided to subcontract the work involved to CCTA. The result is that no government department or agency in Britain apparently collects systematic information on the level of use of public sector Web sites in general, or on trends in usage. CITU's look-ahead advice on future directions for the public sector has often been listened to by departments and agencies, where staff with ICT roles are understandably made anxious by the current rapid change of pace and direction in technological developments, and are keen to correlate their strategies with other agencies. Whitehall departments have often sought guidance on issues such as web design from CCTA and CITU. But departments and agencies with large ICT budgets do not see small-budget bodies like CITU or CCTA as significant players with any right to regulate operational decisions, such as Web site design. CITU's greatest resource in influencing departments and agencies is their ability to involve the Cabinet Office ministers, the Cabinet Secretary, and on occasion even the Prime Minister, in backing central initiatives.

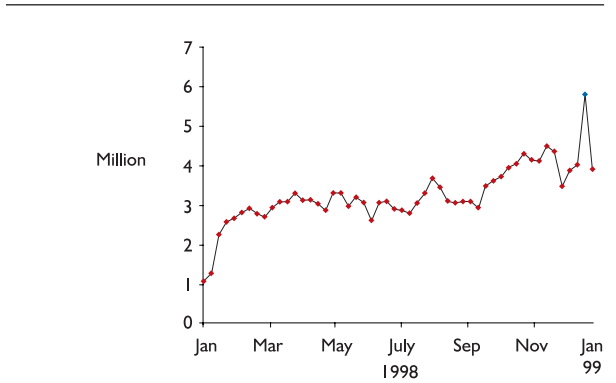
4.7 A second central agency involved in the development of government on the Web is **CCTA (the Central Computer and Telecommunications Agency)**. CCTA is a 'Next Steps' agency, a specialist provider of information services and advice within government. In the early 1980s the organisation was an

arm of the Treasury and played a much bigger role as a central regulator of government IT spending and contracts. As central regulation of IT decision-making was wound down, CCTA was radically reduced in size. By the 1990s it became essentially a trading agency, selling services and advice to departments and agencies on a commercial fees basis. The agency moved out of central London to Norwich, and now has a staff of 200 (down from 540 in 1988) and running costs of just over £13 million a year. In Autumn 1999 the Gershorn report to the Treasury recommended that along with other procurement agencies CCTA should become part of the new Office of Government Commerce (OGC), which would have a supervisory board chaired by the Chief Secretary to the Treasury and a head appointed at Permanent Secretary level. OGC's role is to provide a 'one stop shop' for procurement within government, and it will aim to achieve immediate savings of £1 billion over the next three years.

4.8 CCTA played a central role at the beginning of government on the Web developments by establishing a central Web site for routing users to departmental and agency sites at the address **open.gov.uk** in October 1994. (We avoid here CCTA's long-time description of the site as the 'Government Information Service', or GIS for short, which is very easy to confuse with a completely different initiative the 'Government Secure Intranet', GSI for short.) Many officials stressed to us the importance of the **open.gov.uk** initiative in getting their department or agency started on the Web, because CCTA also hosted sites on its server for agencies new to the Internet. CCTA's basic advice notes on Web publishing influenced the initial style of government Web sites in 1995-97, emphasising simple and uncluttered presentation of information, and accommodating the needs of partially sighted or blind users who access using special site reader software. The **open.gov.uk** site quickly became an established way of finding public sector sites in the period 1995-97, providing an alphabetical list of organisations from central government, quasi-government agencies, the National Health Service and local authorities. Public bodies with sites run by CCTA were automatically registered, and bodies whose sites were hosted by other ISPs only had to notify CCTA to be included. The site also included a 'functional index', which depended on agencies and other bodies filling in a questionnaire. And **open.gov.uk** also provided a search engine where in theory users could type in ordinary language search words and be directed to relevant sites.

4.9 It is now difficult to establish how successful CCTA's site was at different periods. CCTA did not publish data on user sessions for **open.gov.uk**, but only on total hits (which is not a very useful index, because accessing a Web page with multiple elements will count as multiple hits). From mid-1997 CCTA also set up on the same servers as **open.gov.uk** a Royal Web site on behalf of the Queen and the Royal Family, and hits to this basically non-governmental site can serve as a useful point of comparison. Figure 34 shows the weekly pattern of hits which across 1998 averaged 3.3 million a week on the open.gov.uk site, which we estimate at around 470,000 user sessions a week or around 1.9 million a month. In the same year there were just over two million hits a week on the Royal Web site, which we estimate at around 286,000 user sessions a week or 1.14 million a month. Although the open.gov.uk site shows some signs of growth at the very beginning and very end of 1998 the mid-year trend line is fairly static - in a period when Web use generally was rising sharply in the UK and worldwide. Although systematic update material is not available for 1999, data on 'page requests' is available for the somewhat redesigned open.gov.uk site now operated across four Web servers by CCTA, plus the Royal Web site. ('Page requests' data avoid counting multiple hits per page, but still they do not give the more useful 'user sessions' data, since one user may request multiple pages). For a recent week in mid October 1999 there were 2.6 million requests for pages from **open.gov.uk** on the CCTA's government servers, or 376,000 requests for pages per day. By comparison the Royal Web site traffic in this week was only 180,000 page requests, or just under 26,000 page requests per day. In the same week, the top five sites clicked on to from **open.gov.uk** were the Central Office of Information (1.3 million hits), the Department of Health (0.74 million hits), the Department of Environment, Transport and Regions (0.38 million), the Commonwealth War Graves Commission (0.37 million) and the Inland Revenue (0.25 million). Just below this group came the Home Office, the Courts Service, the Metropolitan Police and the Health and Safety Executive.

34 WEEKLY NUMBERS OF REQUESTS (HITS) ON THE OPEN.GOV.UK SITE DURING 1998



SOURCE: LSE SURVEY

4.10 The **open.gov.uk** site is now well registered with the major search engines and CCTA claims that it is 'one of Europe's major public sector Web sites'. But the site has always suffered from the fact that its address or URL is not intuitively findable. Outside the British civil service open government is not a very widely used phrase. An averagely informed user might well guess that the Department of Trade and Industry is **dti.gov.uk**, that the Department of Social Security is **dss.gov.uk** and that the Benefits Agency is **ba.gov.uk**. But she or he would be very unlikely indeed to intuitively associate British government as a whole with the word 'open'. Names like 'central.gov.uk' or 'hm.gov.uk' or 'any.gov.uk' or 'whitehall.gov.uk' might have been more intuitively findable, and more memorable once users had accessed the site once. CCTA might also have registered these and other possible URLs and provided router pages there to open.gov.uk even if that name remained unchanged. The design of **open.gov.uk** was also criticised by many officials in our interviews. Until Summer 1999 the site used a frames design. This approach meant that when users clicked on from **open.gov.uk** the CCTA's logo and search keys still took up around a third of their screen, forcing the new site to be displayed in only part of the screen, so that parts of the new screen were not displayed, nor was the new site's URL visible either. The **open.gov.uk site** was also never redesigned from its launch date in any respect until late Summer 1999. (For instance, for nearly three years the home page had a button on it for 'Government Direct' the 1996 green paper with this title, which received 2.2 million hits in 1998, even though the material included was by then out of date. The **open.gov.uk** homepage also confusingly included another direct access government button with different material) Not only did **open.gov.uk** set a conspicuously static example for other agencies, but the site's home page still does not alert users to current developments. There is a 'What's New' page one click lower down which provides eclectic material supplied by departments. The CCTA's search engine was very widely criticised in our interviews, and in multiple tests we made it never succeeded in prioritising information in any understandable order. Given the general advance in the search engines provided by the main Web portals across this period, the **open.gov.uk** site effectively became less searchable than the Web as a whole from 1998 on. In addition many public bodies registering their sites on the **open.gov.uk** organisational index did not complete the information necessary for its 'functional index', which was thus seriously underpopulated and rather misleading.

4.11 Departmental Web-trends data which we examined show that references from **open.gov.uk** are not numerous. One in 12 DTI site users responding to an on-site survey guessed its URL, compared with only one in twenty who found it via **open.gov.uk**. After 1997 therefore there was a steady drift of departments and agencies away from being hosted by CCTA and towards setting up their own sites. Some interviewees felt that CCTA adopted a deliberate policy of charging 'over the odds' fees in order to encourage them to

move on to private sector ISP firms. Critics also noted that setting up the Royal Web site on the same CCTA servers produced some times when **open.gov.uk** was inaccessible because of the volume of users logging on to catch the more sensational royal developments. A recent increase in bandwidth has helped address this problem, however.

4.12 A decision was taken in late 1998 to relaunch the **open.gov** Web site, partly as a result of CITU looking at some overseas examples of more integrated government approaches to establishing an overall Web presence, and partly reflecting dissatisfaction from 10 Downing Street staff handling the government's overall communications strategy. The relaunch was devolved to the Government on the Internet working group, chaired by CITU, with Cabinet Office, CCTA, Treasury and Downing Street representatives all involved: it began work in January 1999 and aims to produce a relaunch in early 2000. An interim refurbishment of the site took place in late Summer 1999 which effected considerable improvements, getting rid of the frames basis, speeding up the site, and improving the homepage and functional index. At this time it is not clear whether the **open.gov.uk** name will be retained in the fully relaunched site in 2000 or whether a new site name will be used. But the aim is to produce a much more modern and integrated 'front end' for reaching public sector Web sites as a whole, and one which will link more coherently with all other central government sites as a result of the recommendations on Web site design produced by the same working group in Autumn 1999.

4.13 A second key initiative undertaken by CCTA with development funding from CITU has been the **Government Secure Intranet (GSI)**. Set up in April 1998, GSI is a central e-mail and Internet access facility for central government as a whole, managed by CCTA but with the connections and operations actually provided by the private sector firm, Cable and Wireless. A section of the Government Communications Headquarters (GCHQ) in Cheltenham specified GSI to provide secure e-mail facilities for documents up to 'Restricted' status without need for any further encryption. GSI was designed by Cable and Wireless within this specification. This security feature is a powerful incentive to join for senior policy level staffs and for agencies handling personal information on citizens. In order to maintain this enhanced level of security new users to GSI have to register and have the physical security of their whole Local Area Network infrastructure that they connect to GSI accredited for security, as well as not having external connections at lower security levels accessing into their systems. **Firewalls** are provided between the GSI-connected elements of departments or agencies and other domains inside organisations. In addition to the normal GSI service a higher security service called xGSI also exists which provides protection for documents and e-mail communications up to the 'Confidential' level, again devised with help from GCHQ. Cable and Wireless anticipate the future development of a GSI extranet and a GSI suppliers community to connect up other government bodies, for example, local government.

4.14 The standard facilities provided by GSI in 1998-9 were advertised by CCTA as inter-departmental e-mail and document and file transfers, e-mail to the Internet, Web browsing on both the Internet and on GSI (for material not available to the public), and directory services. However, the directory services, which were supposed to allow officials to find the right person to call in other GSI-connected departments, have been put up very slowly and are not yet fully established, attracting a good deal of criticism from our interviewees. Some departments on GSI have provided e-mail addresses only for sections, but not individual addresses for officials within each section. Other GSI services and features are also seen as slow to develop. CCTA speaks of a 'GSI community' and stresses that GSI "allows departments to publish material for the benefit of government as a whole; professional groups to establish collaborative facilities for information and discussion; and shared purchasing of facilities such as news feeds and database access". Despite discontent with the slow arrival of directory services the number of departments and agencies connected has grown steadily from four initially in April 1998 (one of which was the Cabinet Office) to 40 by Autumn 1999, including virtually all of the main Whitehall departments. Developments planned for GSI's immediate future by CCTA and CITU include secure links to European Union sites; remote access to GSI for staff members who are not accessing from a secure physical environment; an extranet for local authorities; and a range of commercial services including authentication, notarising and proof of receipt of electronic materials.

4.15 In the longer term CITU have an idea of converting GSI into a fully-fledged 'government portal', through which citizens would be able to reach the whole of government and which would become an important route for two-way transactions. PA Consulting was commissioned to produce a feasibility study, which was published on the CITU Web site in Summer 1999 and sets out a possible technical architecture for such a portal. Operational responsibility for developing a useful government portal is still unclear, since it would be beyond CITU's resources. Both DSS and the Inland Revenue have been suggested as suitable developers, since they are the departments with the highest levels of contact with citizens. The broader portal concept involves the development of what are called 'metadata', which are essentially ways of labeling the contents of a Web page in such a way that it can be instantly indexed by modern Web search engines, allowing much fuller and more reliable information to be provided about the page to potential readers. Good metadata would also allow more sophisticated and faster searching, with results displayed much more intuitively - so that readers can check the most useful possible sites for their topic first. A key CITU objective is that all UK government data should be held and structured in such a way that it can be accessed from GSI. The viability of any portal scheme depends a great deal on how far departments and agencies actually sign up for GSI, which on a large scale may be appreciably more expensive and perhaps on occasion slower

than operating with conventional Internet e-mail and file transfer facilities. Most ministerial headquarters have signed up all their staff, and we noted above in Part 2 that some DSS agencies are keen to be connected also. However, business-facing agencies in DTI did not see GSI as necessary or appropriate for the vast bulk of their work, although most will have some connection.

4.16 The 'government portal' ideas being examined have not extended to the idea of giving citizens (and perhaps firms) access to free e-mail and Web addresses, on the lines followed already by the Swedish Post Office. There are two reasons why these strategies may be worth considering. First, in the longer term a prominently-used government portal might be essential if the visibility of government in society's information networks is not to reduce continuously over time, with adverse impact on government's ability to get salient messages across. And second the current proliferation of ISPs and portal sites may be superseded in the near future by a shake-out into a few large portals. If this occurred, government might come to depend on links to these established portals, and find that the providers are able to exact a significant charge for channeling users to government sites.

4.17 ICTs have important implications for capital spending, and possibilities for reducing labour costs also. **The Treasury** have no units focusing solely on ICT issues. Treasury discussion with departments now takes place at a number of levels, notably through the Public Service Agreements (PSAs) which set out the outputs which departments will deliver in return for the resources allocated to them. ICTs will in many cases play a key role in the delivery of these outputs. A staff of 150 work on the design and monitoring of the PSAs, mostly working in teams of 12 to 15 'shadowing' individual departments. Two central teams with about 12 staff in each are responsible for budgeting and the PSA framework, one of which addresses high level ICT issues among other matters. The current round of PSAs were finalised for three years in 1998. They make reference to the target for 25 per cent of government transactions to be 'electronic' by 2002, and departments have to sign up toward meeting the target. During 2000 the Treasury will review the PSAs to see what changes are needed in the next round, and will probably incorporate reference to the further *Modernising Government* targets of 50 per cent electronic transactions capability by 2005 and 100 per cent by 2008.

4.18 In discussion with us the Treasury recognised that the development of government on the Web might be held back for the time which it can take larger agencies to change their business planning processes. The absence of competition within government previously meant that the financial drivers for change were different for public sector agencies. However, the Treasury hope that the new focus on outputs which PSAs have introduced will create incentives for agency managers to look more vigorously at better ways of delivering their business. The

Treasury see potential scope for improving the definition of an 'electronic' transaction used for the PSA targets, but any such refinements would need to be discussed with CITU who take the policy lead in this field.

4.19 A number of other central agencies and groupings are involved in influencing government on the Web issues in more peripheral ways. The **Central Office of Information (COI)** maintains a key Web site of all government press releases. It also has a small staff which offers Web site design services on a commercial basis to other public sector agencies, again a facility often used by departments and agencies in the early stages of establishing a site. COI chairs and convenes the **Government Internet Forum**, which holds monthly meetings open to all Webmasters and other staff immediately involved in Web and intranet developments around Whitehall and its agencies. The Forum has played an important role in disseminating knowledge and ideas between agencies because of its representative character, incorporating a wide variety of department and agency viewpoints, unlike the Government on the Internet Working Group which has a limited membership selected by CITU, who convene it. A further potentially influential central grouping was created in May 1999, following a recommendation in the *Modernising Government* white paper that government as a whole needed to adopt a more 'corporate' and joined-up approach to using ICTs to transform the public services. Each of the Whitehall departments has nominated a senior official at board level to act as their **Information Age Champion** and to spearhead change on the components of the overall government IT strategy, with the Cabinet Office providing some support for their work. The information age champions have now begun to meet as a (large) group, but it is still too early to assess what impact this innovation will have.

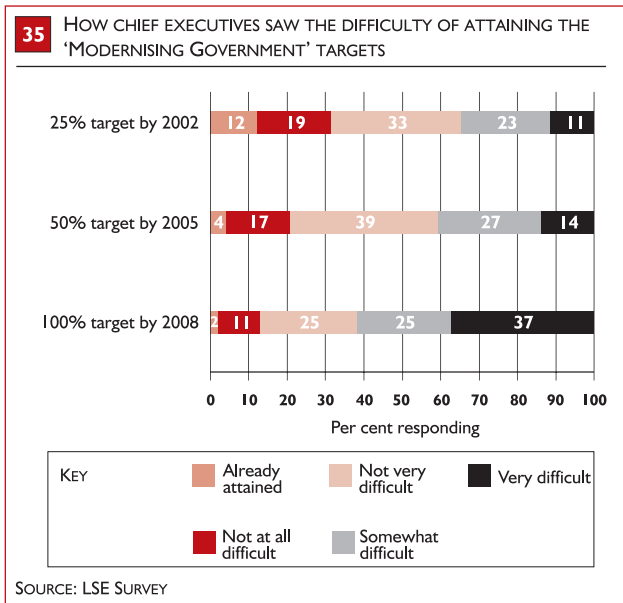
4.20 Some general policy issues arising from Web growth and the *Modernising Government* white paper remain to be clarified, despite the proliferation of bodies with a toe in the water of central Web policy. Top of these problems is how to handle e-mail, which is the normal enquiry mode associated with Web access. We noted in Part I that in November/December 1998 only a minority of Whitehall departments and agencies published e-mail addresses and accepted e-mails on substantive issues or enquiries, but the numbers involved have since been rising gradually. One common civil service practice is to set a norm so that any e-mails accepted are required to get a response within the same time-limit as **white mail**, normally 15 working days. In practice, hard-pressed officials have incentives not to let a backlog of messages accumulate, so e-mails often get faster responses. However, in some cases agencies and departments have interpreted parity with white mail to mean that all responses should be delayed for 15 working days, partly for fear of encouraging repeat correspondence or of stimulating an unmanageable increase in e-mails by providing any faster service. A few agencies take the view, however, that e-mails

should be treated more like phone calls than white mail, and hence should be responded to immediately or at most within a couple of days - a view adopted by the CITU-chaired Government on the Internet Working Group. Where agencies do accept substantive e-mails, practices vary greatly as to which officials receive them. Only a few organisations (such as the Department of the Environment, Transport and the Regions) publish on their web site quite detailed breakdowns of topics of whom to e-mail with what issues. Other agencies publish only a single e-mail address from which messages are routed to appropriate officials, often by a central enquiry team which also handles phone accesses. But the most general Whitehall practice is still not to publish an e-mail address for substantive messages, but only to provide a commenting facility which allows people to notify the Webmaster of glitches on the site or to give feedback on its design. Even so users will often seek to send substantive enquiries to such addresses. Lastly many organisations (including some important Whitehall departments until very recently) do not include any facility for members of the public to e-mail them.

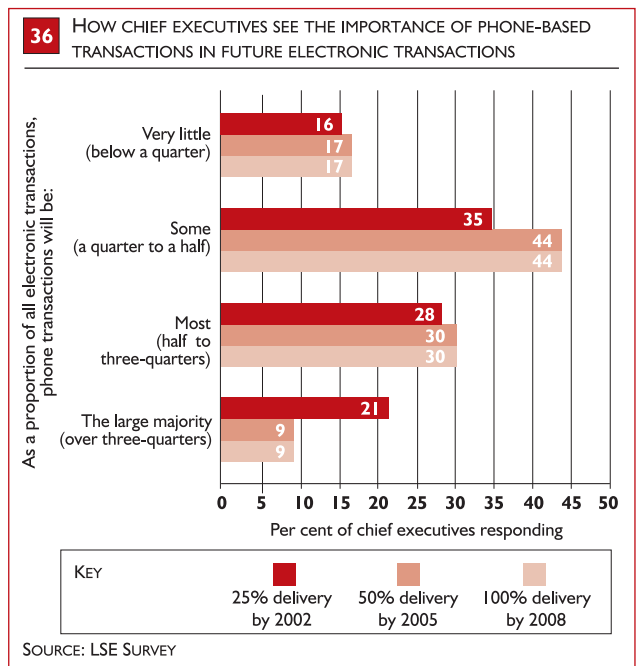
4.21 The risk of encouraging an avalanche of e-mails from the public or from businesses is often raised when government officials discuss this issue. It is clearly important that e-mail contact procedures are worked out both on a common standard across government and linked to a reassessment by agencies of how their external Web sites are constructed. Well-designed sites with simple and direct language, proper interactive features and providing access to substantive and easy to understand information are least likely to generate a flood of e-mails from users. Badly designed or poorly maintained sites, or where the information provided is hard to understand or becomes out of date, will automatically trigger requests for clarification. Unnecessary e-mails are also less likely if multiple contact routes are clearly provided, especially phone links, and if members of the public get some directory services indicating who to contact. There are also risks that mass e-mail campaigns will be made against government sites at times of particular controversy in either the UK's foreign relations or domestic politics. But it is relatively easy to filter out mass e-mails by their originating site, or by the inclusion of particular words in the heading or message. Where departments and agencies regularly receive e-mails on a common topic it is also often possible to recognise such messages (for example, requests for a leaflet or form not available via the Web site) and to send back an automatic reply. Again pre-structured enquiry facilities, where people enter their address details and pre-code their queries, can often be routed straight to agency databases and trigger an appropriate response in a zero-touch manner - such as the dispatch of a form. A focus on zero-touch technologies might well allow agencies to reduce the need for officials to intervene in meeting requests for information or access to basic facilities. However, some senior officials cite authentication/verification issues, security concerns and complex business processes as reasons why such developments are still some way off.

The 25 per cent 'electronic transactions' target

4.22 A central element of the white paper chapter on 'information age government' is an October 1997 pledge by the Prime Minister that 25 per cent of transactions between citizens and government should be capable of being conducted 'electronically' within five years. The 1999 white paper *Modernising Government* greatly extends the planning horizon by specifying additional targets for departments' and executive agencies' capacities to undertake 'electronic transactions', which must reach 50 per cent capability by 2005 and 100 per cent by 2008. In our survey of agency heads and permanent secretaries we asked them to assess the difficulty of achieving the white paper's target for the proportion of transactions with citizens to be carried out electronically (see Figure 35). One in seven respondents said that they were already meeting the 2002 target of 25 per cent electronic transactions, and a further half said that it would be "not at all" or "not very" difficult to meet the target. Nonetheless one in seven respondents felt that the 2002 target would be "very difficult" to meet. Over half of respondents also felt that they would have "little difficulty" in meeting the 2005 target of 50 per cent electronic transactions, and the proportion expecting it to be "very difficult" increased only slightly. However, only two-fifths of respondents expected a straightforward path to achieving the 100 per cent electronic transaction target by 2008, and a third rated this last target as "very difficult". We asked a supplementary question to assess how far achieving the target would be accomplished via telephone transactions alone (see Figure 36). For the 2002 target nearly half of agency heads saw phone transactions as the predominant element in meeting the 25 per cent, but this proportion fell to less than two-fifths of agency heads for the 2005 and 2008 targets. There was a consensus that phone transactions would make up a quarter to a half of electronic transactions by 2005 and continue at this level for 2008.



4.23 Although CITU has not previously had a monitoring role, it has taken on responsibility for collating data on progress towards the 25 per cent target (although the work involved is actually contracted out to CCTA). 'Transactions' are defined narrowly by CITU and the Cabinet Office as any two-way dealing between a government office and a citizen: one-way processes are excluded, for instance a citizen just phoning a department for information or accessing a government Web site. The Cabinet Office worried that if a transaction was more broadly defined to include one-way accesses then departments and agencies might simply insert an electronic phase into otherwise paper-based processes, thereby evading the point of the 25 per cent pledge. By contrast 'electronic' transactions are very broadly defined by CITU and the Cabinet Office as any which systematically employ phone, video, **electronic data interchange (EDI)**, computer payment, a kiosk or ATM (automatic teller machine), or a Web or Internet connection. 'Systematic' phone communication excludes ordinary random or unplanned phone calls, and implies the use of call-centres and well-established, phone-based administrative procedures. Even so, it is difficult to understand why *Modernising Government* continues to define 'electronic' as embracing systematic phone communication, other than the longer history of this particular phraseology in the *Government Direct* policy. In the current period, 'e-mail', 'e-commerce', 'e-banking' and so on, are all taken in normal parlance to refer to Internet-based or Internet-only transactions. So the white paper's use of 'electronic' is likely to become increasingly idiosyncratic and liable to misinterpretation by all but the most expert of government insiders. Over the next few years explaining to the media, the general public and even the great majority of public servants themselves that 'electronic dealings' includes phone-based transactions (and not just Internet/Web dealings) is likely to be inherently confusing and time-consuming, detracting from the simplicity and effectiveness of the original pledge.



4.24 CITU initially organised a data trawl of Whitehall departments in Autumn 1998, which revealed that there were then wide inconsistencies in the interpretation of what constituted a dealing or a transaction, undermining the usefulness of the statistics which departments initially put forward. Following a meeting of all departments, CITU re-specified 'transactions' in the way set out in paragraph 4.23, and allowed departments to focus on a sample of their main 'dealings' with citizens (construed as a series of 'transactions'). In April 1999 revised figures on departments' progress towards meeting the 25 per cent target were produced on an agreed basis, announced in Parliament and posted on the CITU Web site. The new data separated out capability to handle 'electronic' transactions from actual transactions, and also counted separately payments made by agencies through the banking system (which have historically been much more automated) from other forms of dealing. However, the figures did not distinguish which transactions were phone based and which were Web- or Internet-based or used a PC. Accompanying notes to the published tables for each department almost made clear this distinction in many cases, but not quite. So in June 1999 we asked CITU to undertake some further analysis, going back to departments and asking them to clarify which dealings are phone-based and which are Web-based or Internet-based.

4.25 Figure 37 shows electronic dealings for each department situation in 1999 and in departments' projections for 2002, excluding payments made through the banking system which have mostly been developed over many years and hence say little about departments' current progress on modernising government. In addition to the already published data we asked CITU to go back to departments and to estimate capabilities for 1999 and 2002 which excluded telephone-only transactions. Additional data on this basis are included in Figure 37. (For details on these data, see Appendix 11). Across government as a whole the number of transactions excluding payments was estimated at 480 million in 1999, of which departments could already process just under a third electronically on CITU's definition, falling to just over a fifth when telephone transactions are taken out. For 2002 the projected volume of transactions is expected to grow to 518 million, and electronic capability to expand to 70 per cent including phones, and 59 per cent excluding phones. Figure 37 shows that the vast bulk of capability to handle non-payment transactions will be operated by the top nine departments, which are arranged in descending order of the projected size of their total transactions in 2002. All the big departments or departmental groups will be comfortably above the 25 per cent target in 2002 in terms of their capabilities for processing transactions. Six of the successful eight major departmental groups will also have an actual take-up level of electronic transaction in 2002 which is comfortably above 25 per cent. But achieving actual, take-up rates close to this level is much more difficult for three departments. Inland Revenue will achieve 21 per cent take-up of electronic transactions on its declared data, up from 18 per

cent in 1999. It expects only three per cent self-assessment returns to be submitted electronically in 2002, which may seem very conservative. However, there do seem to be some glitches in the current electronic versions of simple forms for self-assessment so that the Revenue's figure is probably realistic. The Department of Environment, Transport and the Regions will achieve 17 per cent take-up of electronic transactions, up more appreciably from 9 per cent in 1999. And we noted in Part 2 that the Department of Social Security will still have negligible electronic take-up, apart from handling just over a sixth of retirement pension enquiries over the phone.

4.26 Although Figure 37 seems to chart encouraging progress, there is a strong sense in which looking at the departmental group statistics is in fact rather misleading. Within departmental groups, and especially in those with most transactions, the most detailed CITU data on individual major dealings show that the level of change in electronic transactions is not very large in many cases (see Appendix II). The apparent improvements in government-wide and departmental totals can be traced back in the main to positive developments in just ten agencies, which either have made the most substantial improvements in electronic access or have the largest existing volume of transactions with citizens:

- Rapid progress towards digital administration in non-payment transactions is heavily concentrated in the following six agencies:
 - **HM Land Registry** will double its already impressive take up for pre-completion on-line searches (8.5 million new electronic transactions), and develop from scratch a take-up of nearly 50 per cent for post-completion searches (6.4 million new electronic transactions). In addition, it will make 5.6 million new, electronic payments transactions.
 - **The Employment Service**, within the Department for Education and Employment, will grow the take-up of vacancy taking and filling accomplished electronically from one-sixth to two-thirds (10.9 million new, electronic transactions), and create some capability for handling jobseekers' allowances electronically (nearly 2.5 million new, electronic transactions).
 - **Companies House** will grow its total appreciably (3.3 million new, electronic transactions) and the **Patent Office** less so (0.3 million new electronic transactions), both within DTI (see Part 3).
 - **The Driver Standards Authority**, within the Department of Environment, Transport and Regions, will double the electronic take-up of driving and theory tests to over 90 per cent (1.2 million new, electronic transactions).

37 HOW FAR CENTRAL GOVERNMENT DEPARTMENTS WILL CONDUCT ELECTRONIC DEALINGS WITH CITIZENS (EXCLUDING PAYMENTS THROUGH THE BANKING SYSTEM) IN 1999 AND 2002

Departmental Group	All dealings (000s)	1999		2002	
		Per cent of actual dealings electronic	Per cent electronic capability excluding phone	Per cent actual dealings electronic	Per cent electronic capability including phone
Inland Revenue	227,714	18	29	42	80
Department for Education and Employment	65,067	6	9	18	45
Department of the Environment, Transport and the Regions	50,260	9	11	18	76
HM Land Registry	23,807	19	22	37	88
Department of Social Security	33,370	2	2	4	4
Ministry of Agriculture, Fisheries and Food	1,670	16	6	24	99
HM Customs and Excise	17,616	28	15	28	79
Department of Trade and Industry	8,917	16	21	22	84
Lord Chancellor's Department	12,409	22	24	28	48
National Savings	8,272	4	23	46	na
Department of Culture, Media and Sport	7,380	47	27	55	na
Northern Ireland Civil Service	6,694	11	11	20	68
Foreign and Commonwealth Office	3,114	24	32	43	47
Scottish Office	3,438	43	43	44	95
Ministry of Defence	4,291	64	32	64	93
Office of National Savings	3,028	22	21	41	33
Home Office	1,303	6	0	6	35
Cabinet Office	711	46	51	52	54
Welsh Office	529	43	60	98	75
DFID: International Development	72	28	1	28	27
HM Treasury	37	0	100	100	100
Department of Health	129	86	8	93	29
Export Credits Guarantee Department	1	59	47	95	60
TOTALS	479,828				518,471

Note: na means the data is unavailable
SOURCE: CITU DATA

- **The Courts Service**, within the Lord Chancellor's Department, is creating from scratch an electronic capability to issue claims and make payments to jurors, and is making slower progress on probate. In all 0.8 million new electronic transactions should result.
- Two agencies will show rapid change because of new administrative procedures being introduced:
 - **The Ministry of Agriculture, Fisheries and Food**, will show rapid change because the introduction of a new computer tracking system for cows will grow its total annual volume of transactions from 1.7 million in 1999 to 18.3 million in 2002. In CITU's ratings the Ministry's total for non-payments transactions will become larger than that of Customs and Excise, and more than half that of DSS. Two-fifths of the cattle tracking transactions will be electronic, adding 6.7 million new electronic transactions.
 - **The Inland Revenue** will introduce a new Construction Industry Scheme for income taxation, with 17.5 million new transactions, of which just under a quarter will be electronic, adding 4.4 million new electronic transactions.
- Three agencies will make large volume increases in the numbers of transactions they process electronically, but with only fairly small upward shifts in the percentage of transactions so processed:
 - **Inland Revenue** will grow its electronic take-up of PAYE transactions from five to nine per cent (up 4.9 million on a base of 112 million transactions), and move from a one to a three per cent electronic take-up of self-assessment (up 1 million on a base of 51 million transactions).
 - **The Driver and Vehicle Licensing Agency (DVLA)**, in the Department of Environment, Transport and Regions, will grow the electronic take-up of vehicle licensing from three to nine per cent (up 2.3 million on a base of 38 million transactions) and of driver licensing from 4 to 11 per cent (up 0.4 million on a base of 6 million transactions).
 - **Customs and Excise** will create a ten per cent electronic take-up of VAT collection from scratch (up 0.8 million on a base of 7.8 million transactions).

Conclusions: Developing government on the Web

4.27 The current central machinery for co-ordinating and promoting the development of government on the Web is rather weakly developed. Central capacity to shape the development of departments 'and agencies' planning for government on the Web is limited by:

- the manner in which the overall target regime for information age government has been specified by the Cabinet Office (see paragraph 4.28);
- a lack of systematic and useful monitoring information;
- continued uncertainty on macro-issues (such as how far swipe or smart cards will be used in government interactions with citizens, rather than the temporary ID numbers for specific transactions which are more characteristic of the Web);
- the small development budget available centrally for coordinating investments; and
- the absence inside central government of any substantial equivalents of the drivers for efficiency-improving and cost-saving changes found in the private sector.

Central initiatives such as the creation of the open.gov.uk site were important when they were first made, but were subsequently allowed to stagnate for long periods. Government on the Web has developed in an unplanned manner, and it is now hard for citizens to navigate central government sites. There is a risk that this history might currently be repeating, if the Government Secure Intranet were to prove too slow to become more than just an expensive e-mail facility.

4.28 The Prime Minister's 25 per cent electronic transactions target has clearly had a useful effect in bringing the modern capabilities of government on the Web to the attention of a wide range of agencies and departments. The basic pledge that government as a whole will be able to process a quarter of transactions in a broadly electronic fashion by 2002 has already been substantially met. Looking beyond this achievement, however, there are grounds for scepticism about the implementation value of the overall target regime in its current form, and about the usefulness of the monitoring information being collected as indicative of the overall trends across government. It is not clear what value attaches to quoted capabilities greatly in excess of actual current take-up. Although departments' ICT systems may have the capacity to handle expanded traffic, the organisational capacity to handle the logistical frictions generated by a greatly expanded volume of electronic traffic may not be in place. The existing monitoring data also suggest that a flat rate, across-the-board

target imposes little real discipline on some large departmental groups and agencies, since they can point to already existing high volumes of electronic transactions without yet implementing any substantial new changes in their practices. The vast majority of our interviewees expressed strong doubts about the meaning to be attached to CITU's definition of an electronic transaction. In responses to our survey most chief executives and permanent secretaries did not see the 25 per cent target or even the 50 per cent target as very demanding. The Cabinet Office should consider reviewing the overall target regime so as to focus down on *improvements* in individual agencies' capabilities to process transactions and dealings, separating out:

- (1) accesses by e-mail, the Web, digital TV and intelligent voice recognition on the one hand; and
- (2) accesses by phone on the other.

The target regime should incorporate reference to *actual take-up levels* for both these routes, and not just theoretical capabilities. The target regime should also address *new progress against established base levels* for the take-up of electronic transactions, rather than focusing solely or mainly on across-the-board figures for government as a whole.

4.29 The Cabinet Office should jointly review the options available with the Treasury, in the context of the Public Service Agreements. Staff involved in such a review may find it helpful to take account of established guidance on the design of performance measures available from a range of official sources, including the National Audit Office. This literature all suggests that effective performance indicators must exert some pressure for improved performance on *all* the agencies covered. Performance targets for several years in the future, which can already be met by a large number of agencies, are unlikely to be effective. Those agencies comfortably above target have no incentive to improve. At the same time other agencies which start well below the target level may face a practically impossible task in coming up to the level in the time available. They could attract unwarranted public criticism, which is demoralising for current managers and staff seeking to effect improvements from a poor historical base.