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PROGRESS IN IMPLEMENTING E-GOVERNMENT IN BRITAIN:

SUPPORTING EVIDENCE FOR
THE NATIONAL AUDIT OFFICE REPORT
GOVERNMENT ON THE WEB II

**Patrick Dunleavy, Helen Margetts, Simon Bastow,
Ruth Callaghan, and Hala Yared**

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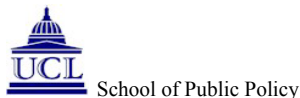
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Contact: LSE Public Policy Group, London School of Economics, Houghton Street,
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Contact: spp@ucl.ac.uk
Web site: www.ucl.ac.uk/spp/

The research team involved in the *Government on the Web II* report were:

Patrick Dunleavy	Professor of Political Science and Public Policy and Chair, LSE Public Policy Group, London School of Economics and Political Science (LSE)
Helen Margetts	Professor of Political Science and Director, School of Public Policy, University College London (UCL)
Simon Bastow	Research Fellow, School of Public Policy UCL, and LSE Public Policy Group
Ruth Callaghan	Researcher, LSE Public Policy Group
Hala Yared	Researcher, School of Public Policy, UCL

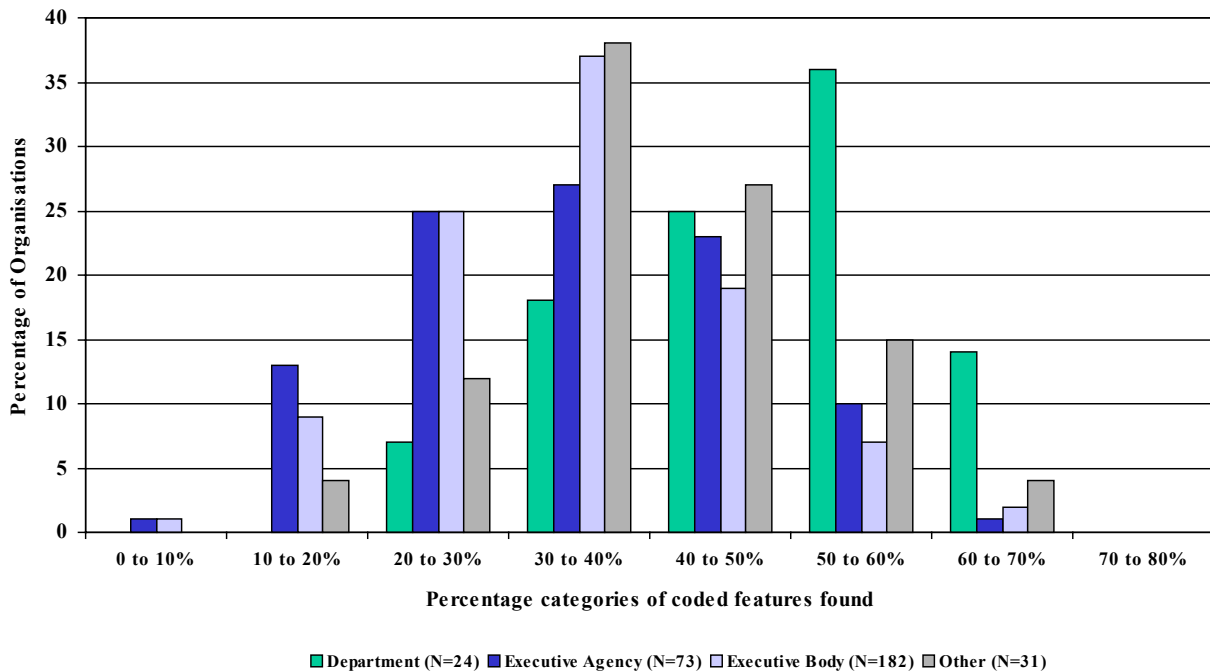
The following post-graduate students from LSE were the Website coders for the autumn 2001 censuses of central and local government:

Nabila Djelti; Roman Gerodimos; Nina Kataja; Geeta Kulshrestha; Guy Lodge; Raffaele Marchetti; Jaime Torres Melo; Philip Parvin; Vander Caceres Salazar; and Vijayakala Seevaratnam.

2. PROGRESS IN E-GOVERNMENT FOR CENTRAL GOVERNMENT DEPARTMENTS AND AGENCIES

The 2001 coding frame for the central government census included 99 possible features or facilities which agencies or departments could have present on their main Web sites. We added up the scores across these variables to get an overall percentage score for each agency. Figure 1 shows the results split across the four main types of agency: ministerial

Figure 1: Distribution of central government aggregated scores in 2001 by percentage of coded features found on web site



and other departments; the ‘Next Steps’ executive agencies; executive bodies (also often called NDPBs for non-departmental public bodies); and a miscellaneous group of other Whitehall agencies, regional offices of departments and public corporations.

Departments are the most advanced type of central government organization: their modal category (the bar in Figure 1 for the largest number of departments) is that for 50 to 60

per cent. The modal category for both executive agencies and bodies is the 30 to 40 per cent category.

Figure 2: How different types of central government agencies were spread across categories for the percentage of Web site features found

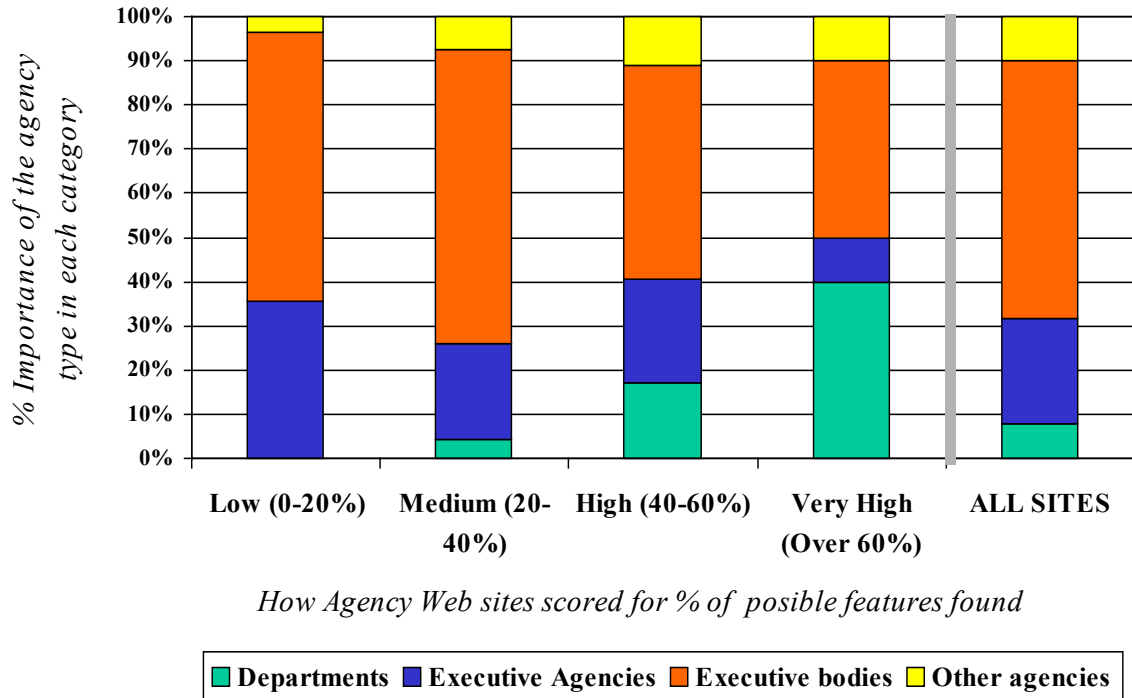


Figure 2 gives another view of the same pattern by showing how far the different types of agency are represented in the different categories for per cent of possible features. Departments are four times as common in the ‘very high’ group as they are in the census as a whole, while executive NDPBs are under-represented. The low group of laggard agencies is populated predominantly by executive agencies and bodies.

In our 2001 census we also looked at how central government sites performed in terms of different types of Web facilities, distinguishing between three main groups of features shown in Figure 3. 'Basic site features' are concerned with the overall structure, appearance and operations of agency sites and the presence of key pieces of corporate information and communication with citizens or enterprises. 'Publishing' features relate to the more extensive use of Web sites for systematic electronic publishing, the early stages of the transition to 'open book' government where agencies are clearly making an effort to project a significant part of their own information base into the publicly accessible realm. Characteristically most material electronically published by public agencies is still mainly presented in list-wise fashion. 'Interactive' features relate to the re-provision of information or features in a way that allows citizens or business users to specify their own requirements and tailor the information they receive, for instance by entering their postcode and getting back information tailored to their specific part of the country, or by having excellent search facilities or indexing allowing them to refine their questions. Figure 3 shows that the basic site and publishing features were much more commonly found across all the Web sites of types of government agencies than were interactive features. The Whitehall departments have especially done a good job in developing electronic publishing features on their sites, but they also showed the largest disparity with the stage of development interactive facilities, which is much less. On average departments achieved scores of 70 per cent for the presence of publishing features on their sites, but their scores for interactive features were half this amount.

Figure 3: Basic site, publishing, and interactive coded features found on central government web sites

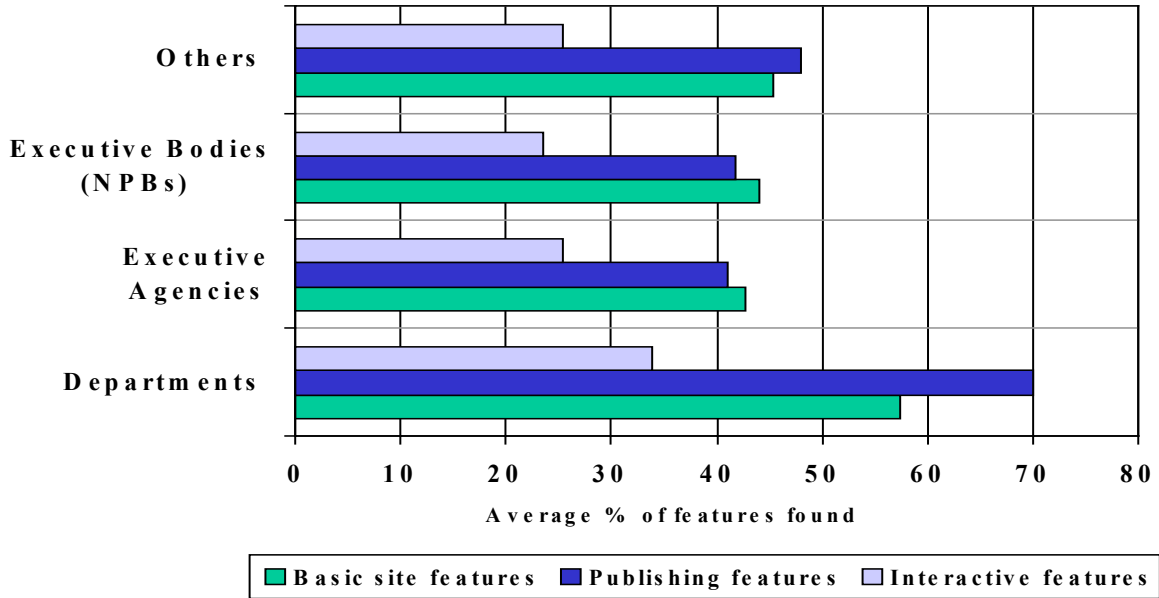


Figure 4 gives another view of the stages of development across central government Web sites, showing what proportion of the sites for different types of agency allowed citizens or businesses to accomplish full transactions with them. The range here was not large, with a fifth of departments facilitating transactions and less than one in six agencies or executive bodies doing so.

Figure 4: Percentage of central governments where full transactions can be made via their web sites

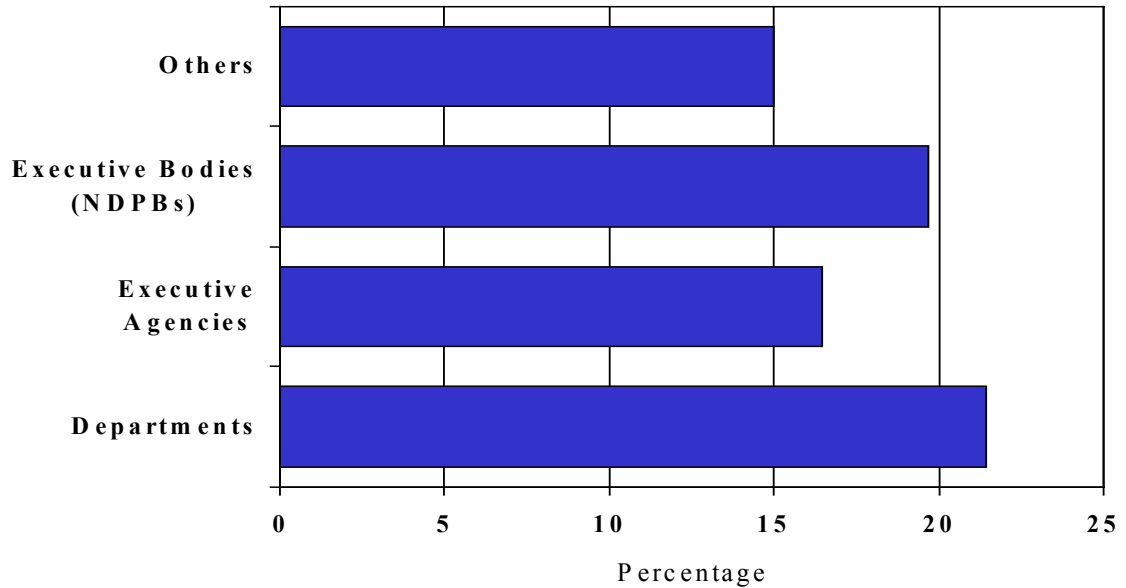
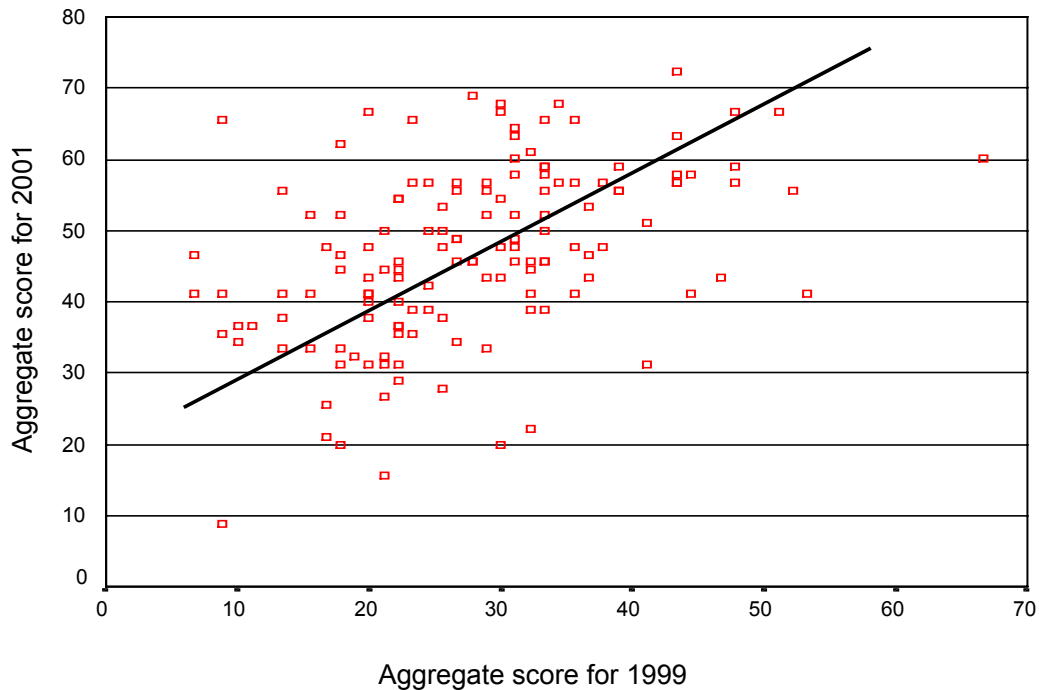


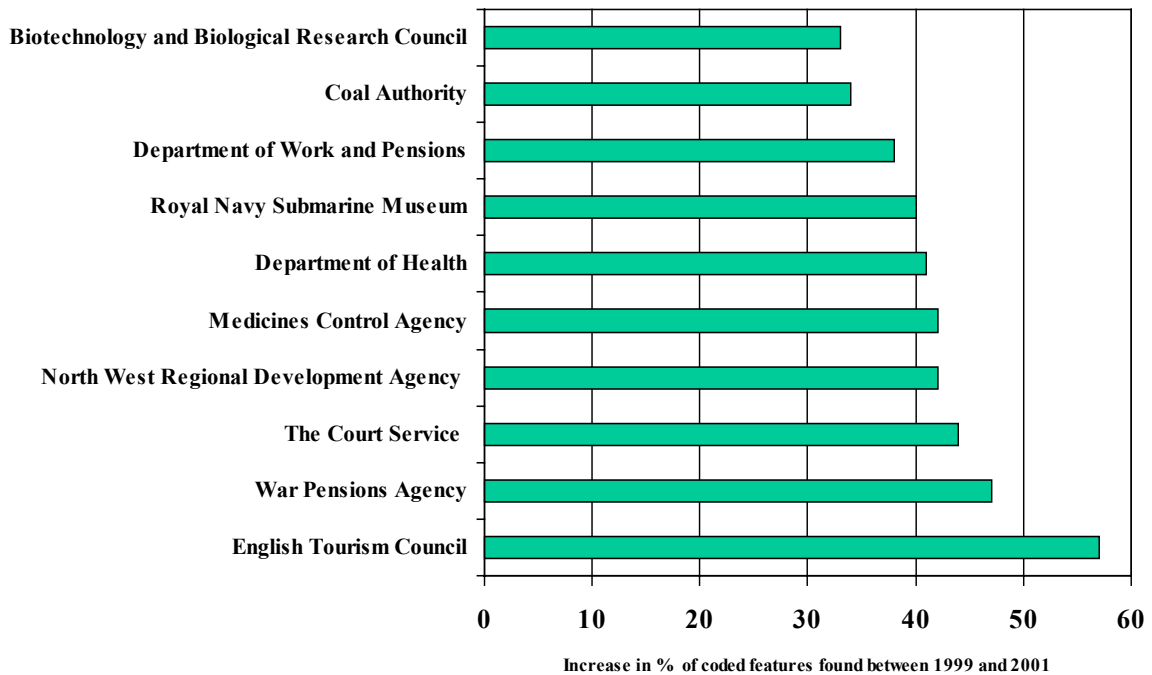
Figure 5 shows how central agencies scored on the percentage of possible site features present in 2001 with the proportion present in our earlier 1999 Web census. Each red dot represents one agency or department. The black line shows the ‘best fit line’ (which minimizes the vertical spread of data points away from the line). It slopes upwards to the right, indicating a positive association, so that a good 1999 score influenced most agencies to have a good 2001 score, even though our coding frame developed a great deal across the two censuses. However, Figure 5 also shows that the ‘goodness of fit’ is low – there are many data points scattered a good way away from the best fit line, so that other factors are clearly at work in influencing agencies’ performance. Agencies a long way above the line have radically improved their 2001 scores compared with 1999. Agencies a long way below the line have improved much less than average.

Figure 5: Central government organisation aggregated scores for common coded features found in 1999 and 2001



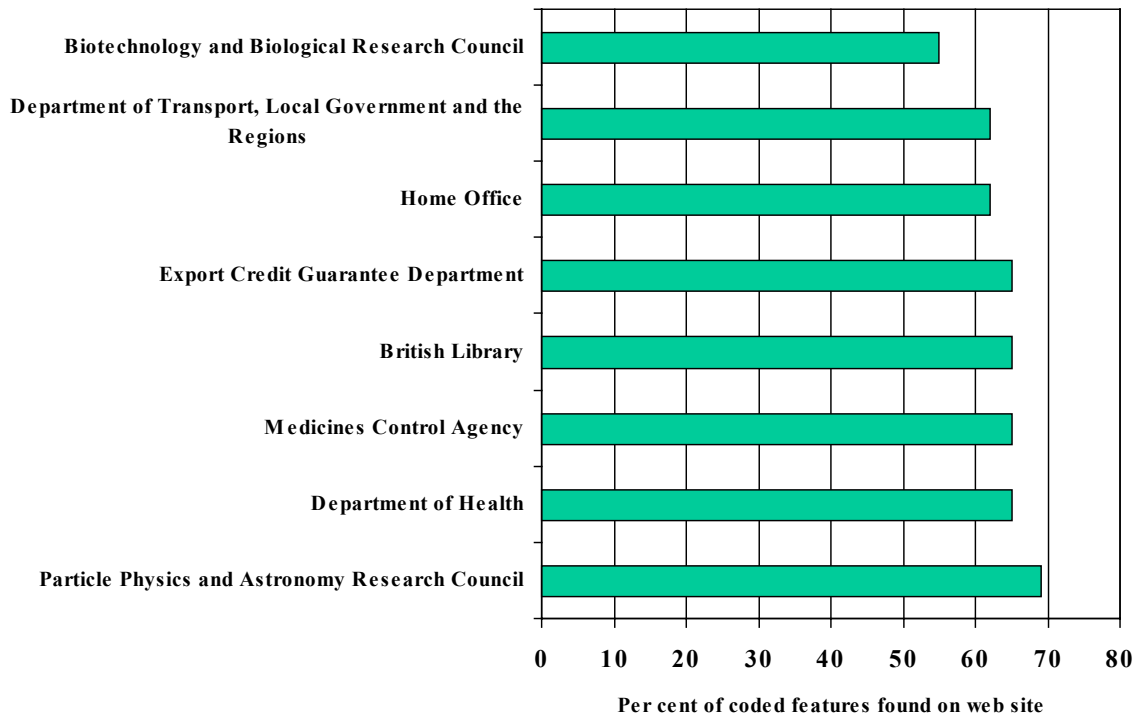
The central government agencies which have most improved their scores for the proportion of possible features on their Web sites are shown in Figure 6. Some of the bodies included here are not what most people would see as ‘mainstream’ government bureaucracies, such as a tourism agency, a museum, and a scientific research council. But others, such as the two Whitehall departments, a regulatory commission on medicines and a pensions agency, are very conventional public administration organizations showing radical improvements in their Web technology. For instance, the Department of Social Security was strongly criticized for its unimaginative and limited Web provision in the 1999 *Government on the Web* report – but here in its new guise after reorganization as the Department of Work and Pensions it shows a near 40 per cent positive change in the proportion of Web facilities and features found on its site in 2001 compared with the 1999 picture.

Figure 6: Top 10 ‘most improved’ central government web sites between 1999 and 2001



Looking at the top 8 central government Web sites in 2001 shown in Figure 7 there are again some ‘unconventional’ or academically-orientated agencies in the list, with the Particle Physics and Astronomy Research Council taking the top slot with four fifths of possible features present on its site, and another research council and the British Library in the list. But there are three large citizen-orientated Whitehall departments shown (the Department of Health DOH, the Home Office and the Department of Transport, Local Government and the Regions), plus the Medicines Control Agency. Interestingly there is only one business-facing agency in the top eight list, the Export Credit Guarantee Department which provides assistance to business in financing overseas trade.

Figure 7: Top 8 central government web sites by the proportion of coded featured found in 2001

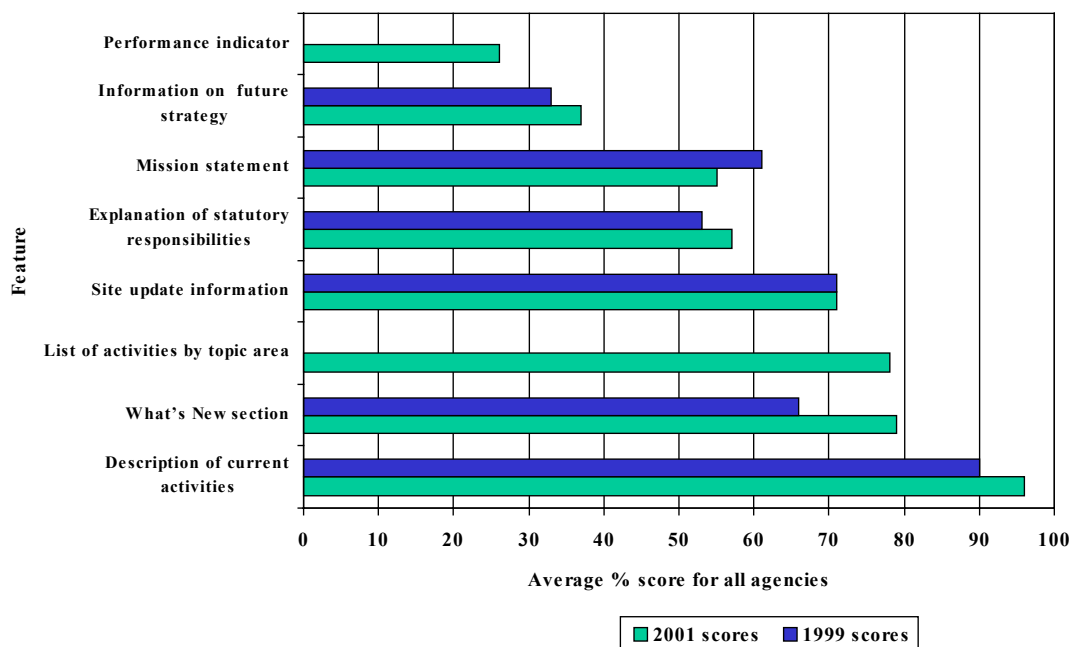


HOW CENTRAL AGENCIES PERFORMED ON PARTICULAR FEATURES

For the remainder of this section we move from considering overall features of the central government Web census to looking at more detailed information on the presence or absence of particular features on agencies' Web sites. Wherever we have comparable information from our 1999 survey this information is included as well.

Figure 9 shows the presence of basic information features on sites across central government as a whole. This aspect was quite well handled in our 1999 survey and there is no major change or improvement here. Indeed one feature (having

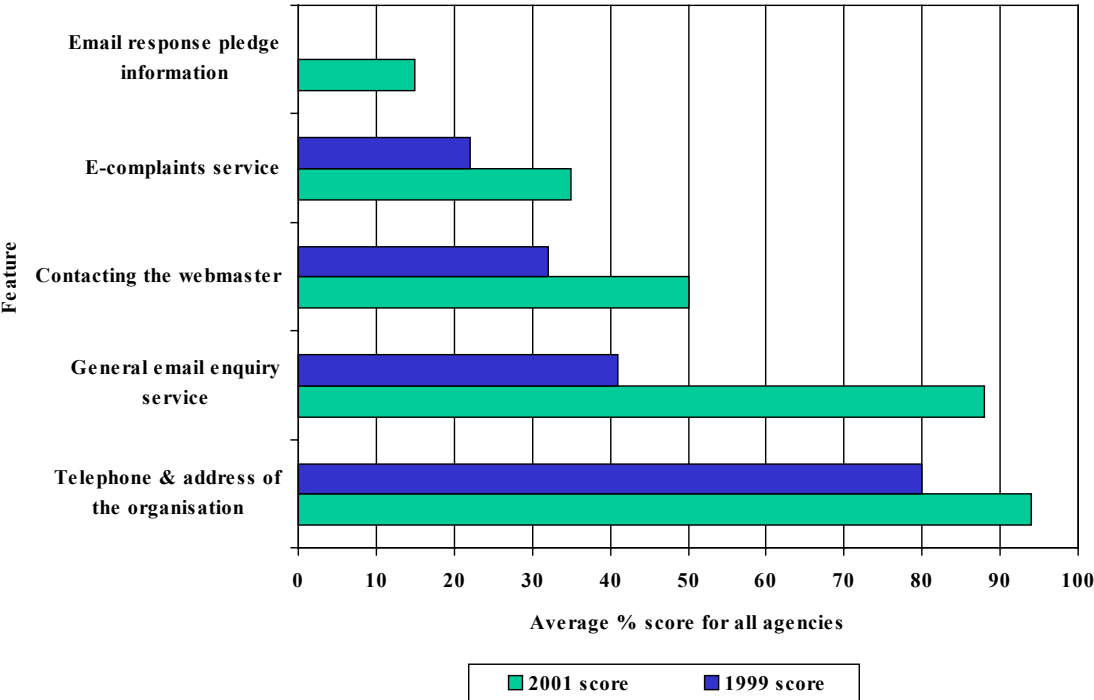
Figure 8: Basic information features on central government Web sites



a mission statement) has actually become *less* common in the last two years as agencies have moved away from ‘brochureware’ towards more customer-orientated sites with genuinely useable features. There has been an improvement in the proportion of sites with a ‘What’s New’ section.

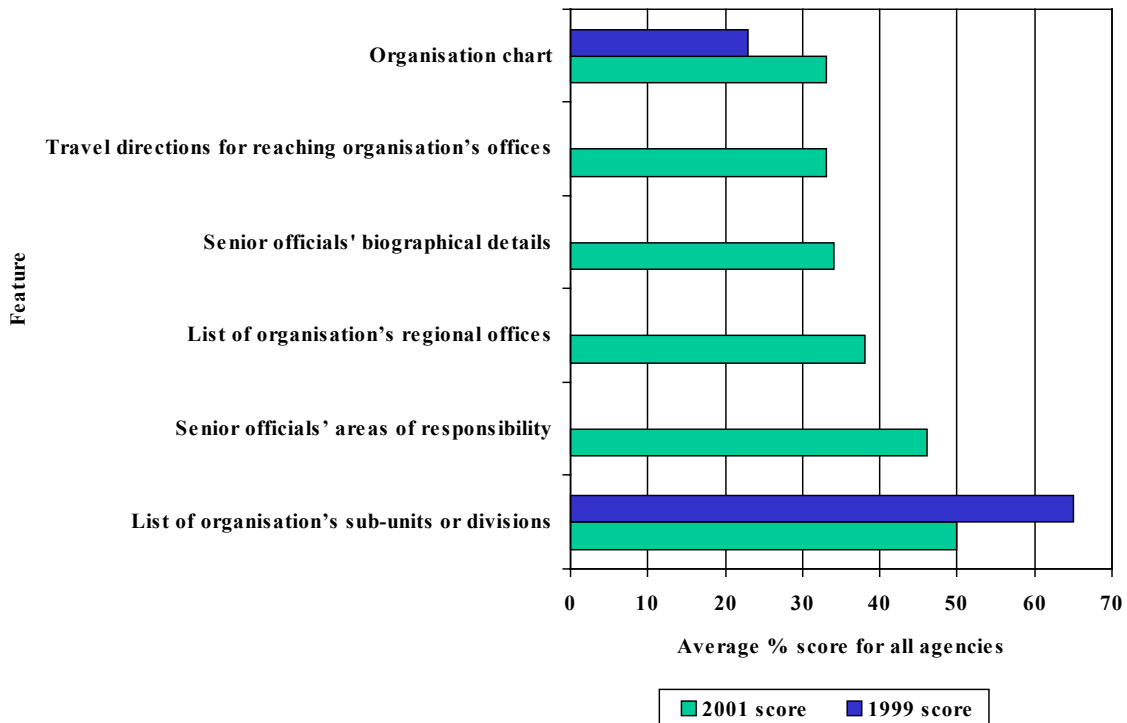
A better picture of more radical change is shown in Figure 9, however, which covers more interactive ways of providing information to individual users. There has been a huge increase in the provision of e-mail contact points by central agencies since our 1999 survey. And there have been smaller but significant improvements in the provision of e-complaints services and provision for users to e-mail the Webmaster about problems with the site. There have been modest improvements in other basic facilities. In 1999 one in five central agencies did not even provide full address and telephone access details on their sites, but by 2001 this proportion fell to only one in sixteen.

Figure 9: Features allowing users to contact central government agencies with specific enquiries



One of the most important problems which citizens and enterprises face in dealing with central government agencies is that they may not regularly interact with the organization. For instance, a citizen who contacts the Passport Agency to get a passport may not need to go back to them for a further nine and a half years, when she needs a new passport issued. Central agencies are also often large and complex organizations, especially Whitehall departments. So the extent to which agencies communicate information about their own organization on their Web sites is of considerable importance. Figure 10 shows that more agencies are providing an organization chart and fewer giving long listings of their sub-units than in 1999. But only around a third of agencies provide other useful information, such as guidance on what senior officials do, biographies of these personnel or even basic information on how to reach the organization's offices.

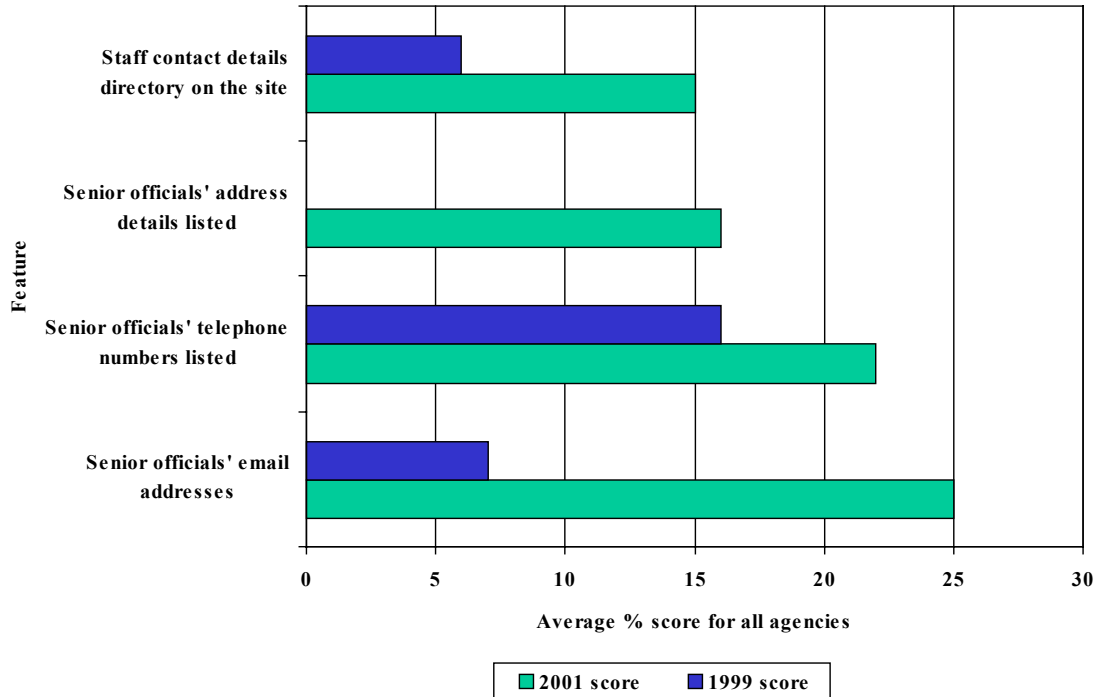
Figure 10: Features explaining the structure and responsibilities of central government agencies



Another aspect of increasing openness in central government agencies concerns how hard or difficult it is for citizens to penetrate the organization's public façade and instead contact specific people within central agencies. Many organizations using the Web intensively now put their telephone directories on the Web and quite detailed breakdowns of which personnel do what, maximising the ability of outside people to reach the right person without being referred from one office to another. Figure 11 shows that central agencies have made some progress in this respect, but still have a considerable way to go. The proportion of agencies giving e-mail addresses for senior officials has more than trebled since 1999, but it is still only a quarter of all organizations. Staff directories on the Web have doubled in frequency but are present in fewer than one agency in six. Interestingly though these Internet-specific contacting aids are no less widespread than information on more orthodox contact routes: many central agencies

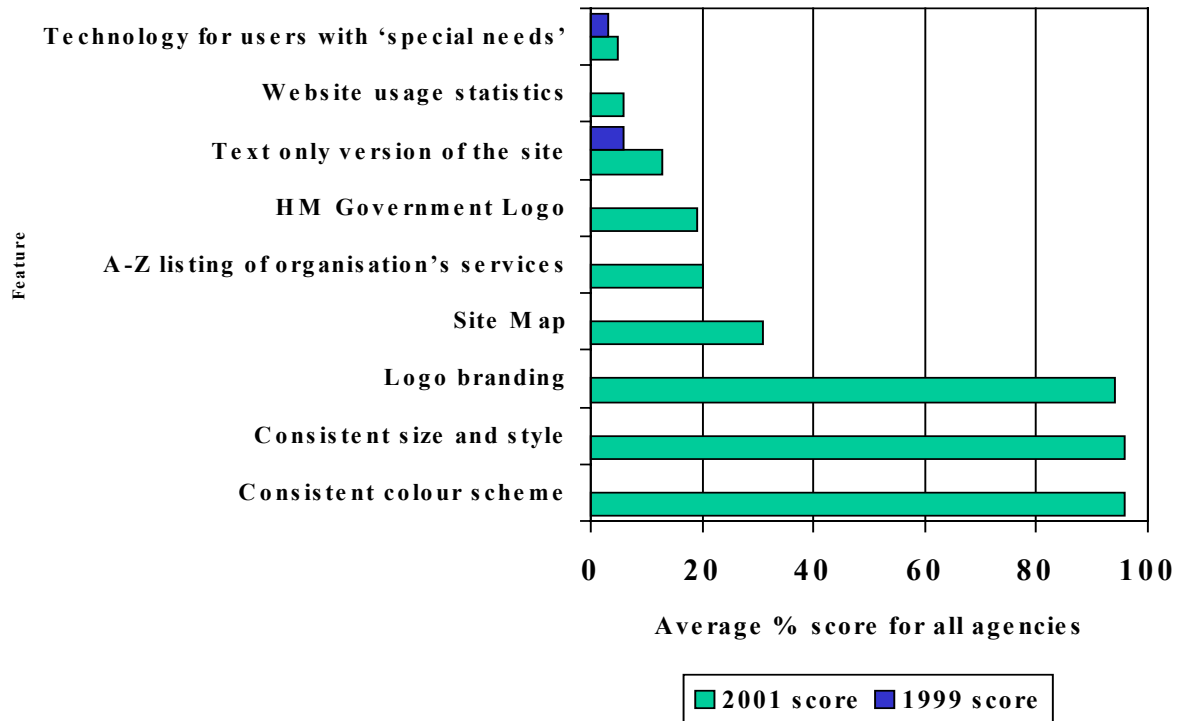
seem to be just ‘closed’ organizations per se, rather than holding back on providing e-government forms of access in particular.

Figure 11: Features allowing users to contact individuals within central agencies



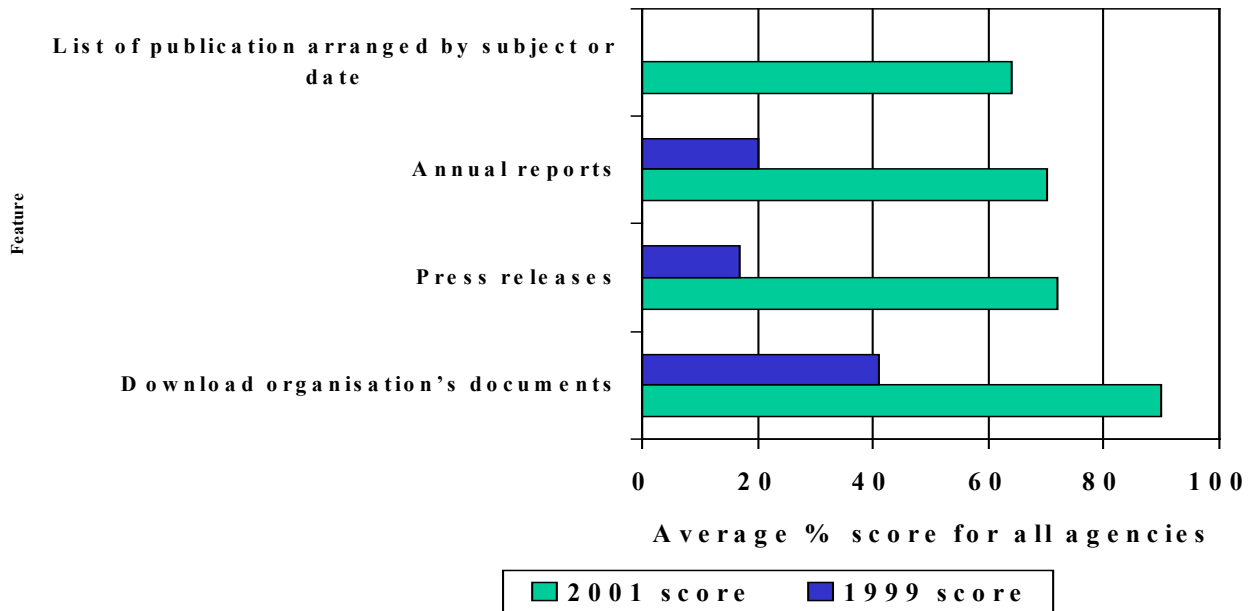
The general design of central agencies Web sites shows certain now common features, and others which are poorly developed. The original *Government on the Web* report in 1999 criticized the jungle of different styles and appearances on Web sites: often there were radically different styles adopted on the Web pages for different parts within a single organization. In 2001, however, we found that virtually all organizations now have properly designed sites with consistent ‘look and feel’ across them, as Figure 12 clearly shows. However, other features which might have been expected to be commonplace (such as an A to Z listing of services, a site map, or easily accessible Web statistics) were rather rarely found. Less than one in five of central government sites was even branded with an HM Government logo on or near the homepage.

Figure 12: General guide and style features available on central government sites



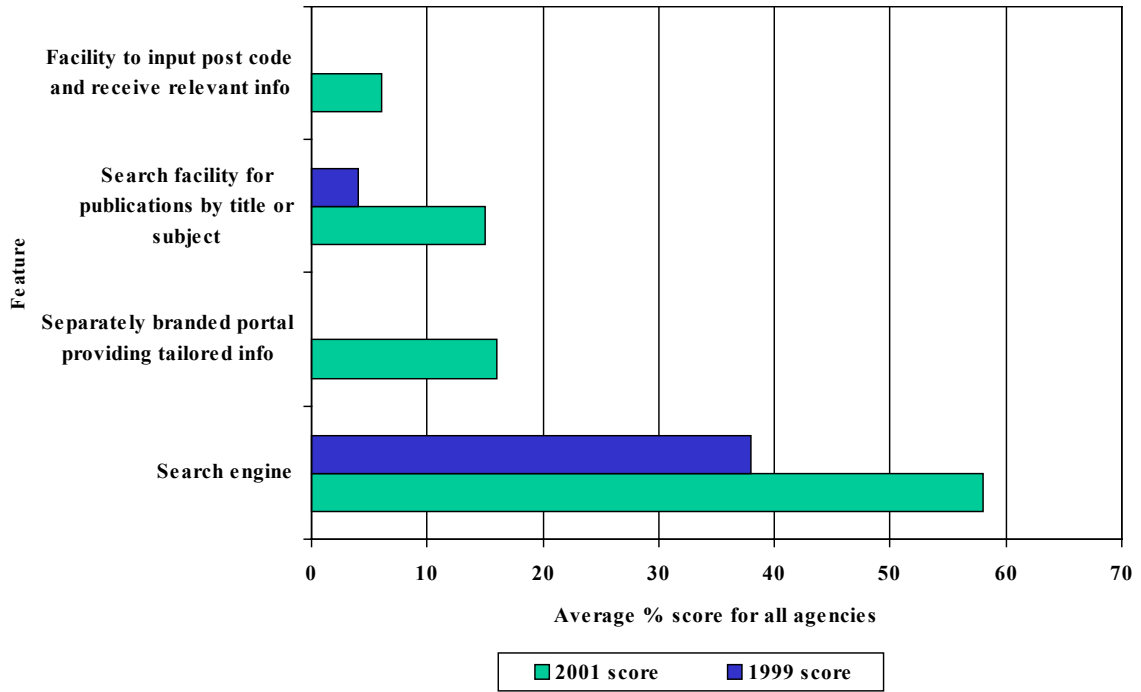
Perhaps the biggest changes in the features provided on central government Web sites in the two years from 1999 to 2001 has been the expansion of electronic publishing facilities, shown in Figure 13. The proportion of agencies providing downloads of their documents online has more than doubled from two fifths to nine tenths in two years. The proportion of agencies providing their press releases and annual reports online has tripled in the same period, although at least of quarter of agencies still do not provide these seemingly essential materials on-line. Over three fifths of agencies now list their publications systematically on-line, although we found few which were yet attempting to sell them on-line.

Figure 13: Basic publishing features on central government sites



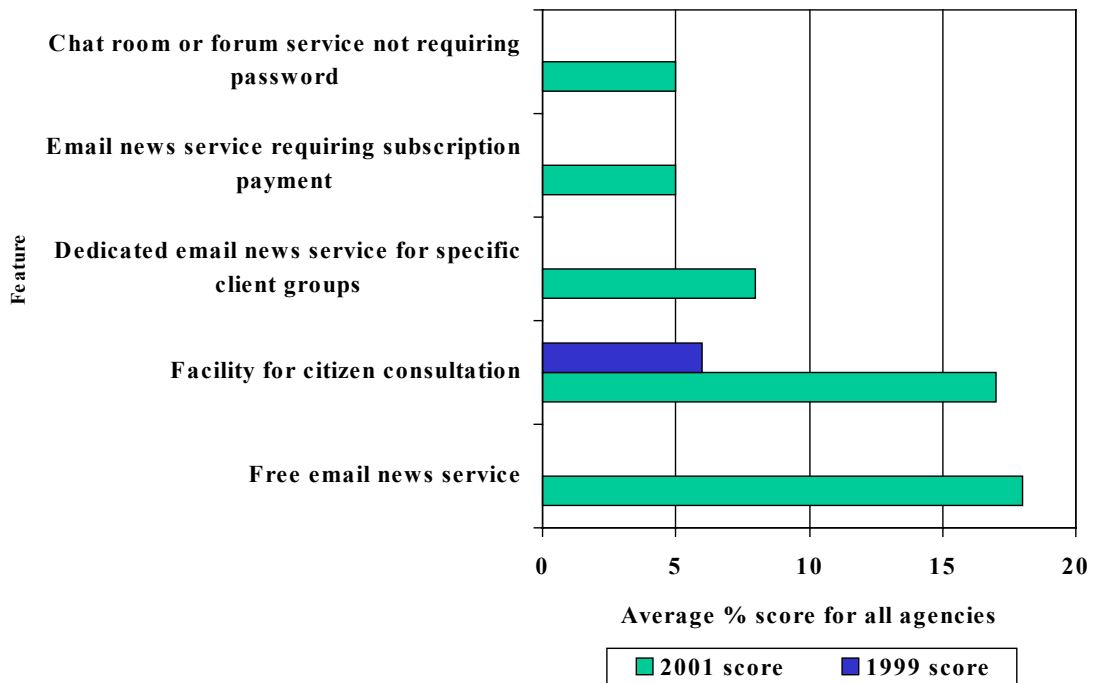
Because central agency Web sites are often large, and their users may only visit them from time to time, the quality of search facilities is an important issue. Figure 14 shows that the proportion of sites with a search engine grew by almost half of its 1999 levels in the period up to 2001. But there are still poor facilities on central agencies' sites for finding publications. And only one in sixteen central agencies allows users to input their postcode and receive information orientated to their local or regional area.

Figure 14: Features allowing users to search central agencies' websites for relevant information



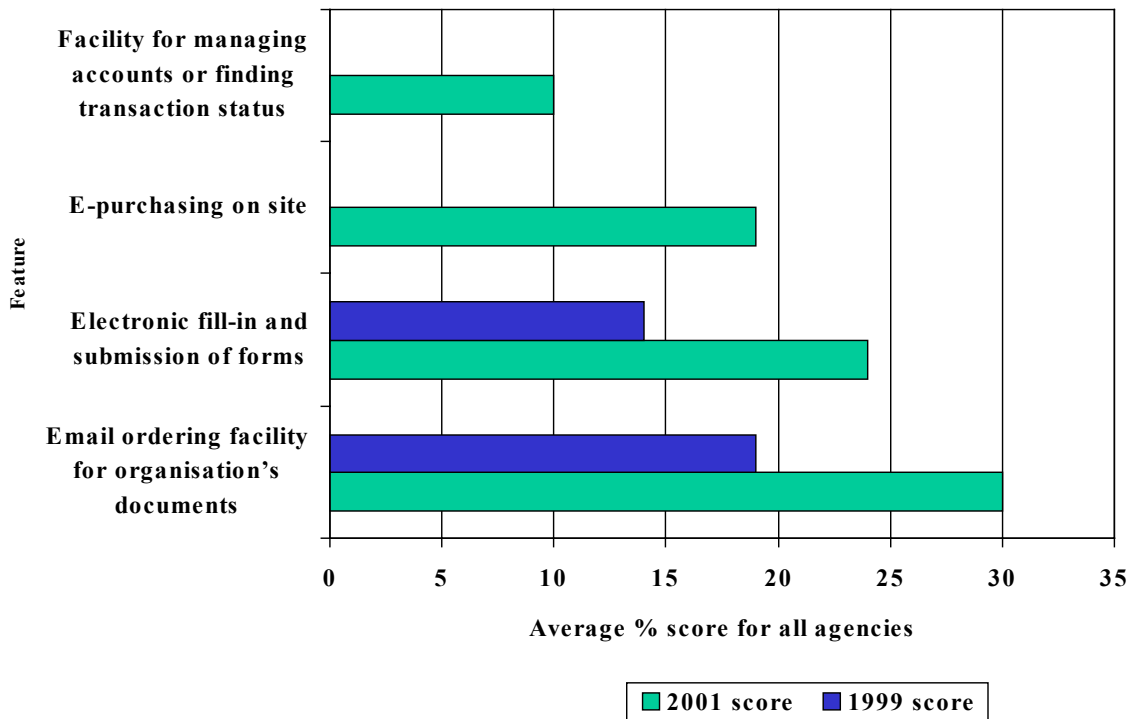
Another small growth area in central agencies' use of the Web is shown in Figure 15, where citizen consultation facilities have expanded from one in sixteen sites in 1999 to one in six in 2001. Nearly one in five central agencies now also offer a free e-mail news service, a feature which was not formally measured in 1999 because it was almost completely absent. Chat rooms or discussion forums are still very rare, found on only one in 25 central agency sites.

Figure 15: Advanced features providing information or advocacy channels for users



Much of the efforts by the Office of the e-Envoy to foster the development of e-government has been focused on encouraging the provision of transactional facilities. Figure 16 shows that some modest facilities have grown modestly, such as the ability to submit forms on-line, the ability to order documents by e-mail and the provision of e-purchasing facilities. But these features are still far from widespread – fewer than one agency in four allowing on-line submission of electronic forms. One in ten agencies now offer facilities for users to manage accounts with them or to track the status of transactions with them on-line.

Figure 16: Transactional facilities available to users on central government sites



The final aspect of central agencies' provision which we consider here concerns the extent to which they link to other organizations. Figure 17 shows that agencies have considerably increased their links to other central government bodies, now provided by three quarters of sites. They also have begun to link more to non-governmental organizations since 1999, and there is evidence from 2001 only of a significant minority of sites linking to private firms, international organizations and foreign governments. A more surprising finding is that only just over one in four central agencies provides links to www.Ukonline.gov.uk, the new and heavily funded site created by the Office of the e-Envoy to act a a government portal.

Figure 17: Electronic links to other organisations provided on central government sites

