Cross government

Digital Britain One: Shared infrastructure and services for government online
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Cross government

Digital Britain One: Shared infrastructure and services for government online

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In 2000 the Government decided to move public information and transaction services online. This reflected an increasing expectation that people and businesses wanted to find information online 24 hours a day and frequently also prefer to do business with government online rather than via the post or telephone.
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This report can be found on the National Audit Office website at www.nao.org.uk/digital-britain-2011

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Key facts

<table>
<thead>
<tr>
<th></th>
<th>Directgov</th>
<th>Business.gov</th>
<th>Government Gateway</th>
</tr>
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<tbody>
<tr>
<td><strong>Costs</strong></td>
<td></td>
<td></td>
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<tr>
<td>Lifetime cost</td>
<td>£128m</td>
<td>£204m</td>
<td>£147m</td>
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<tr>
<td></td>
<td>2004-05 to 2010-11</td>
<td>2002-03 to 2010-11</td>
<td>2005-06 to 2010-11</td>
</tr>
<tr>
<td>(Costs from launch in 2001 to 2004-05 are not available)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Financial benefits to government</strong></td>
<td>Not tracked</td>
<td>Not tracked</td>
<td>Not tracked</td>
</tr>
<tr>
<td><strong>Financial benefits to users</strong></td>
<td>Not tracked</td>
<td>Benefits to businesses estimated (£668m in 2010-11)</td>
<td>Not tracked</td>
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<tr>
<td><strong>Wider benefits to the UK taxpayer</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Number of government websites converged into service (by end of March 2011)</td>
<td>287</td>
<td>175</td>
<td></td>
</tr>
<tr>
<td>Availability (2010-11)</td>
<td>99.9%</td>
<td>100%</td>
<td></td>
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<tr>
<td>Cost per visit (2010-11)</td>
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<td>£1.70</td>
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<tr>
<td>Total number of visits (2010-11)</td>
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<td>17.7m</td>
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<tr>
<td><strong>Wider benefits to the UK taxpayer: Government Gateway</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Number of public sector bodies using Gateway in 2011</td>
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<td></td>
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</tr>
<tr>
<td>Number of live services in 2011</td>
<td>227</td>
<td></td>
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<tr>
<td>Availability (2010-11)</td>
<td>99.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak traffic successfully handled</td>
<td>2.5m transactions (January 2011)</td>
<td></td>
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</table>
Summary

1. In 2000 the Government decided to move public information and transaction services online. This reflected an increasing expectation that people and businesses wanted to find information online 24 hours a day and frequently also prefer to do business with government online rather than via the post or telephone. However, Government was also aiming to modernise public service delivery and reduce costs.

2. The Government initially recognised that, to encourage online services to develop, it would need to make critical ICT infrastructure and technical expertise available for public bodies to share and reuse. This would save time, cost and reduce risk in developing individual services. The Cabinet Office decided to build the Government Gateway (Gateway), which was launched in January 2001. Gateway is a set of secure, accredited technical support services which are integrated within online services such as tax return filing. It allows people and businesses to exchange personal information with government securely or make financial payments safely through the internet. The Cabinet Office originally developed Gateway but responsibility was transferred to the Department for Work and Pensions (DWP) in 2008.

3. In 2005, the Government estimated there were over 2,500 websites which public bodies had separately developed and hosted. The Government considered that this confused citizens and businesses trying to find information and services and led to unnecessary costs. The Government therefore decided to rationalise all websites progressively and converge their public-facing content onto two services. Directgov (www.direct.gov.uk), managed by the Cabinet Office, provides government information for the public. The Business.gov service (a ‘family’ of four websites for the four nations of the UK, for example www.businesslink.gov.uk for England), is now managed by HM Revenue & Customs (HMRC) and provides government information for businesses and their agents. In 2006, the Cabinet Office began to work with departments to implement the website rationalisation policy. Since 2007 the Cabinet Office has provided funding to the Central Office of Information (COI) to deliver this work.

4. This report evaluates the value for money of the investment in shared infrastructure and services, and of rationalising and converging the websites that have underpinned government online services. Gateway and the Directgov and Business.gov services provide shared infrastructure and services that have been reused by many public bodies to develop their own online services. This has increased standardisation in government information for public and business users through a collaborative process. Throughout this report, ‘users’ denotes the public and businesses that use government online services; ‘stakeholders’ are the local and central government organisations and devolved administrations that use the shared infrastructure and services.
This report is based on the concept that ICT-based government services should have the same business rigour as any other aspect of government. ICT is not a special case and ICT-based services must be able to demonstrate their focus on achieving value for money by evaluating likely costs and benefits, monitoring them as the service develops and by building in all the necessary elements of success, such as robust governance structures, process controls, staffing capabilities and management information flows. With that in mind, our work on Gateway and the services has been based on a standard analytical framework of business performance.

As part of developing online services the Government has begun to implement a new digital strategy. This is based on recommendations made by the UK Digital Champion in October 2010. To deliver the new strategy, the Government Digital Service (GDS) was established in the Cabinet Office in March 2011 with a new Executive Director for Digital recruited from the private sector in July 2011. The strategy aims to move all public information services to digital delivery ('digital by default'). While at an early stage, plans focus more on user needs and the quality of services provided by public bodies, as well as a new way to confirm user identity, known as ‘federated identity assurance’. The GDS is starting to plan the future of digital policies, governance, shared infrastructure and services. At this point, while key projects are in the initiation phase, it is crucial that the GDS builds in the right mechanisms to deliver value for money.

**Key findings**

The average cost of Gateway, Directgov and Business.gov taken together has been £90.3 million per year over the past three years. Work equating to 74 per cent of expenditure has been outsourced to ICT supply companies. In 2010-11, £59 million was spent running the two services and £22 million on running Gateway.

Since Government has not routinely measured the benefits of online services, it cannot demonstrate optimal use of resources. We found only one instance where Government had estimated the benefits of its investment in online services. For 2010-11, Business.gov estimated that it had saved business £21 for every £1 spent. It is likely that there are benefits to providing all the information business needs in one location, but it is not possible to say how much of this benefit would have been delivered anyway, if the information had only been available from the multiple websites from which Business.gov’s content is assembled. Stakeholders have not generally modelled benefits through the use of common infrastructure, nor have they had mechanisms in place for tracking and reporting these savings. Whilst we accept the difficulties in determining benefits from shared infrastructure and services, the absence of benefits makes value for money impossible to assess.
The Gateway, website rationalisation, Directgov and Business.gov were developed independently at different times and by different parts of Government, resulting in a loss of value for users and inefficient use of resources. There is evidence that poor user experience with Gateway has damaged the reputation of the service provided by Directgov, but under current structures there is no mechanism to resolve this. In addition, some operational inefficiencies have resulted from this fragmented approach to services. For example, Directgov and Business.gov each have their own supporting software, which means that some stakeholders are required to have staff trained in the use of both systems.

The different business models of Directgov, Business.gov and Gateway provide lessons for the GDS. Both Directgov and Business.gov have been funded by their home departments, and stakeholders have not generally paid for the web hosting or other digital services that they have used, although some specialised services are paid for by the departments who commission them. In contrast, Gateway matches its costs with payments from its stakeholders. Payments broadly reflect the level of use by each stakeholder but there are plans to develop this commercial model further towards a ‘pay as you go’ arrangement. Without information on the relative benefits, it is not possible to compare the value for money of the different approaches.

The annual cost of Business.gov was between 22 per cent and 26 per cent higher than Directgov over the past three years. The two services have different types of content, audiences, delivery channels and operating models; for example, Business.gov has outsourced much more of its operation than Directgov, under a contract with Serco. Without information on the relative benefits, we have no basis for comparing value for money.

While financial benefits are not clear, performance has been managed and most targets have been met.

Since 2006, 1,526 government websites have been closed under the rationalisation policy. It is not clear how many sites existed in 2006, but the Central Office of Information (COI) reported that on 1 July 2011 there were 444 open government websites remaining. Departments were committed to closing 243 of these. The Cabinet Office did not have a mandate to compel stakeholders to close their websites, so it is not possible to say if progress would have been quicker if the timing of closures had not been voluntary. To date, not all public bodies have complied. Some continue to develop new websites and, in some cases, use alternative website names to bypass the ban on new websites. The number of such sites is not known, but the COI reports that examples included marinemanagement.co.uk (now defunct) and censusjobs.co.uk.
b Directgov and Business.gov have both met the targets they were set by the Cabinet Office in 2008, for the convergence of agreed public-facing content over the three year period 2008-09 to 2010-11. Working with stakeholders, Directgov moved 95 per cent of public-facing content (287 websites) onto its website against a target of 95 per cent over the three years. Business.gov moved 98 per cent of business-facing content (175 websites) onto its website against a target of 95 per cent in the same period.

c Directgov and Business.gov have met their convergence targets while maintaining high levels of user satisfaction, although the usage of the Business.gov service has not met targets. Between 2008-09 and 2010-11, Directgov maintained customer satisfaction between 72 and 79 per cent. In the same period, Business.gov customer satisfaction levels were high, ranging from 93 to 97 per cent. However, only 20 per cent of business people used the service, compared with a target of 45 per cent. No figures are available on the proportion of the public who used Directgov, although it had over 30 million visits per month by November 2011.

13 There is scope for improvement:

a There are no specific targets for the take-up of Gateway by stakeholders or for users' satisfaction. In 2011, 77 public bodies used Gateway but no target was ever set for Gateway's optimal usage. Government now has a strategy to introduce a new identity and assurance service that will replace some of Gateway’s services. Gateway does not collect information directly about user satisfaction. However, Directgov has identified from comments received on its own website a series of difficulties that users commonly have, especially when using Gateway to register and enrol for new public services or when logging into these services. Gateway is working with Directgov to identify whether these issues are due to Gateway itself and to address them.

b The Directgov and Business.gov services are experiencing falling levels of stakeholder satisfaction. Stakeholder satisfaction for Directgov dropped from 71 per cent at the end of 2009-10 to 60 per cent in 2010-11. Stakeholder satisfaction for Business.gov in the same period reduced from 90 per cent to 84 per cent.
14 Pay constraints are a barrier to recruiting and developing digital skills. The market rate for people with digital skills is equivalent to salaries for senior civil servants. This has presented difficulties in recruiting staff with up-to-date skills and current market knowledge and resulted in decisions to outsource Business.gov and employ interim contractors within Directgov. In 2008-09, when the major drive towards convergence of public-facing content started, 75 per cent of staff costs for Directgov were for interim staff. This reduced slightly to 67 per cent in 2009-10 but was still at 49 per cent in 2010-11.

15 Moving Gateway to the DWP, from the Cabinet Office in 2008 has probably had benefits owing to the DWP’s broad ICT infrastructure and service management capabilities. However, the management information is not available to demonstrate this quantitatively. Gateway is now just one of a set of ICT infrastructure services that are operated by the Corporate and Shared Services IT Directorate of the DWP. While it has a relatively small budget, Gateway is able to draw on the management and technical skills (especially design, security and procurement) within the DWP, as required, thus keeping staff costs to a minimum. Access to this expertise has brought additional rigour into the management and maintenance of Gateway. We also have evidence that the broader purchasing power, market knowledge and supplier relationship management of the DWP have reduced the annual operating costs for Gateway from £28 million to £22 million between 2009-10 and 2010-11.

16 All three services have met high availability targets, delivering nearly 100 per cent service availability for their users and stakeholders. All three services have detailed business processes in place for quality assurance and change control. Compliance with the processes and controls around publication for the services has been maintained, even as the rate of convergence has increased. However, we did find evidence that stakeholders of Business.gov found operational processes and decision making to be slow, while there is scope to make greater use of data which the Directgov helpdesk collects to improve the service.

17 The technology that underpins the three services is becoming obsolete and is unlikely to be appropriate for the new digital services which the GDS envisages. The services are still operating largely satisfactorily against their original requirements, but new techniques and products now available on the market are likely to offer better value for money for the future. Alpha.gov, a prototype website for Government to explore new designs and gather user feedback, was completed during 2011 and the GDS is developing a further ‘beta’ prototype. For Gateway, the DWP is addressing two technical risks. First, investment in new technology is expected during the current year to allow Gateway to continue to be security accredited and, second, storage capacity will need to be increased so that Gateway’s largest stakeholder, HMRC, will receive the service it needs during the January 2012 period for filing self-assessment tax returns.
The future

18 At the time of this report, the GDS’s plans were at an early stage. However, the GDS is starting to take on responsibility for coordinating all the policies, shared infrastructure and new developments relating to digital services, many of which we have evaluated in this report.

19 Some existing policies and shared services may be reused, but it is more likely that they will be replaced. For example, the Directgov and Business.gov services are expected to be replaced by a new single gov.uk domain during 2012. A public test of the replacement for Directgov is expected to be launched in early 2012 on the new single domain, along with a private ‘beta test’ of a new publishing platform to replace government department sites. The Government intends to increasingly use social media. Public services and information will increasingly be aimed at those areas of the internet used by particular communities or target audiences such as new mothers or young people.

20 There are positive signs, with the advent of the GDS, that the Government is giving more attention to the critical links between digital strategy and its wider ICT and procurement strategies. For example, the Government’s ICT strategy\(^1\) includes standards and essential common ICT infrastructure and services needed for digital services. Also, Government Procurement, part of the Efficiency and Reform Group in the Cabinet Office, will need to establish new supplier relationships to meet the GDS’s requirements.

Conclusion on value for money

21 We estimate that the Government has spent on average £90.3 million per year on Gateway, Directgov and Business.gov over the past three years, while the website rationalisation programme has cost between £265,000 and £300,000. We also estimate the lifetime cost of these services since launch has been £479 million, although the costs of Gateway from 2002-03 to 2004-05 were not available. The Government, however, has not generally measured the benefits of this spend, and therefore does not know whether it has under or over invested in these services.

22 From our examination, it is likely that the services have delivered some cost savings to stakeholders and some benefits to users. For example, the Directgov and Business.gov services have enabled citizens and businesses to access information about government in a more organised way. Business.gov has estimated the benefits its service delivers to businesses. However, without robust data to rely on we cannot conclude that the Government has delivered value for money.

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1 The NAO expects shortly to publish a review of the status of implementation of the government ICT strategy.
Recommendations

23 The GDS has only recently been set up but will need to take decisions quickly on governance, policies and investment in services. New perspectives and skills are needed, but also lessons should be learned from the past. This report makes recommendations to the GDS and the Cabinet Office, highlighting important lessons for them as they develop digital services in the future. We have not made recommendations for the services reviewed in this report as each of these will ultimately be changed, replaced or integrated into the GDS.

24 Our work provides five key lessons for the Cabinet Office, including the GDS, and DWP:

a Strong coordination of the various elements of digital service delivery is essential. Gateway, the website rationalisation programme and the services have been managed by different departments and have not been sufficiently coordinated. The new GDS, residing in the Cabinet Office at the centre of Government, should ensure that the plans for the future, which it is already developing, including the new single domain, new solutions for identity assurance and policies related to digital service delivery, are fully integrated and managed as part of a comprehensive programme.

b To date, investment decisions have been made without sufficient information on costs and benefits. Converging and rationalising online services has been driven by policy objectives rather than a robust assessment of costs and benefits. As the GDS begins to implement its strategy, during the initiation phase of key projects, it should build its financial and management discipline so that it can make properly informed decisions on the optimal use of resources. Evaluative mechanisms that can accurately and regularly measure the costs and benefits of transforming public services should be inherent in the GDS’s normal operation. When working with stakeholders to transfer services to online channels, the GDS should encourage them to develop similarly robust measurement disciplines.

c It is important that the GDS has the authority to implement policy and works closely with stakeholders. Not all stakeholders have complied with the policy to close websites. Additionally, the services and Gateway show declining levels of stakeholder satisfaction, especially in the past year, during a period when there has been uncertainty about the future development of the services by the GDS. One of the key recommendations from the UK Digital Champion was that the Executive Director for Digital, as head of the GDS, must have absolute control of the user experience across all digital channels. The Cabinet Office should ensure that the GDS both has this authority and actively engages with stakeholders to deliver the best services for users.
d  Addressing the digital skills gap is critical. Our report has found evidence of skills gaps that have persisted over many years. This needs to be addressed both for the short and the long term. The GDS must develop a centre of technical excellence that is at the heart of the Government’s digital strategy, driving forward the fundamental redesign of services throughout the public sector.

e  The new federated approach to identity assurance is innovative and relies on creating a commercial model which is attractive to private sector partners. The Cabinet Office, working with the DWP, needs to ensure that the identity assurance services currently provided by Gateway continue to be available during the transition to the new model and address the security and capacity challenges that Gateway faces.
Government online services

1.1 In 2000, the Government decided that all public services that could be transacted electronically should be available online by 2005. This reflected the increasing expectation that the public and businesses (users) wanted to find information online 24 hours a day. The Government wanted to modernise public services by delivering cheaper online services as an alternative to face-to-face, paper and telephone transactions.

1.2 Figure 1 overleaf charts the key developments in the Government’s digital programme since 2000.

1.3 The Government initially recognised that, to encourage online services to develop across the public sector, it would need to make critical ICT infrastructure and technical expertise available to be shared and reused. As a result, the Cabinet Office launched the Government Gateway (Gateway) in 2001. It enables users of public bodies’ online services to connect, exchange personal information securely and undertake financial transactions, where these are an integral part of the service.

1.4 By 2005, the Government estimated that over 2,500 government websites had been launched. The Government decided that all websites would progressively be ‘rationalised’ and set out its website rationalisation policy. It also announced that all public-facing content from these websites would be ‘converged’ onto two services, Directgov for public users and ‘Business.gov’ (in England known as Business Link) for advice and support to businesses.

1.5 This report focuses on the cost and performance of Gateway, the two government services, Directgov and Business.gov, and the rationalisation of websites. The average cost of Gateway, Directgov and Business.gov has been £90.3 million over the past three years, while the website rationalisation is estimated to have cost a total of between £265,000 and £300,000 since 2007. We also estimate that the lifetime costs of these services since launch has been £479 million, although the costs of Gateway from 2002-03 to 2004-05 were not available. Figure 2 on page 16 records how responsibility for each has changed over the decade.

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2 Cabinet Office, A Strategic framework for public services in the Information Age, April 2000.
Figure 1
UK government digital timeline

Digital programmes

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>UK online strategy and creation of Cabinet Office E-envoy team</td>
</tr>
<tr>
<td>2001</td>
<td>Government Gateway launch</td>
</tr>
<tr>
<td>2002</td>
<td>Business.gov launch</td>
</tr>
<tr>
<td>2003</td>
<td>Directgov launch</td>
</tr>
<tr>
<td>2004</td>
<td>Government ICT strategy</td>
</tr>
<tr>
<td>2005</td>
<td>Transformational government strategy</td>
</tr>
</tbody>
</table>

NOTE
1 The ‘Tell Us Once’ programme is for citizen’s change of address, rather than emailing notifications to multiple public services.

Source: National Audit Office
Service Transformation: better service for citizens and business
Website rationalisation launch

The Digital Inclusion Landscape in England
Tell Us Once programme

Operational Efficiency Programme report
Broadband agenda

Networked Nation Manifesto and Race Online 2012
Departments to publish channel transformation strategies

Digital by Default report

COI – Progress on government websites
Launch of Government Digital Service: 1. Digital policy

Government ICT strategy 2. Assisted digital strategy

UK Government superfast broadband plan 3. Digital England strategy

Open public services paper 4. ID assurance, and single government domain plans

NOTE 1 The ‘Tell Us Once’ programme is for citizen’s change of address, rather than emailing notifications to multiple public services.

Source: National Audit Office
Government is now implementing a digital strategy which builds on recommendations made by the UK Digital Champion in October 2010. Its objectives include:

- a ‘digital by default’ approach, where online will be the preferred option for all public information and services;

- a cross-government ‘assisted digital’ strategy to ensure that no-one will be excluded from services, even if these are only available online; and

- a single online presence for the Government that will integrate the services of Directgov and Business.gov.
Why the NAO is examining government’s digital services

1.7 The National Audit Office’s value for money work focuses on three strategic themes: financial management and reporting, informed government and cost-effective delivery. Our interest in online services and digital strategy is driven primarily by our focus on cost-effective delivery, since the potential impact of the new digital strategy on value for money is considerable.

1.8 We last looked at government online services as a whole in 2007, when we focused on websites. This follow-up report takes a broader look at the value for money of investments underpinning many online public services. It is the first of a series that the NAO intends to publish as it concentrates on Digital Britain. In future, we will evaluate the progress key public services are making towards citizen-oriented digital services (Digital Britain 2) and then evaluate the impact government is having on innovation and growth in the economy (Digital Britain 3). Underpinning this series of reports will be a landscape report on the Government’s strategy on the security of online services (cyber-security), which we will publish in 2012.

1.9 We also intend to look more specifically at the value for money of key online services available to the public. Our report on the progress of HM Revenue & Customs in expanding online tax filing is a recent example.

Our approach

1.10 Figure 3 overleaf shows the structure of our report.

1.11 In Part Two we evaluate the performance of Gateway. Part Three examines the rationalisation of websites, while Part Four compares Directgov and Business.gov. Finally, in Part Five, our report looks ahead to the new government digital landscape which has been emerging over the past 12 months.

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6 Comptroller and Auditor General, HM Revenue & Customs: The expansion of online filing of tax returns, Session 2010–2012, HC 1457, National Audit Office, November 2011. The report evaluates the value for money of HMRC’s expansion of online filing of tax returns which is supported by Gateway.
## Figure 3
Structure of our report

<table>
<thead>
<tr>
<th>Accountability</th>
<th>Summary</th>
</tr>
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<tbody>
<tr>
<td>Value for money of shared infrastructure and services, and website rationalisation</td>
<td>Source: National Audit Office</td>
</tr>
<tr>
<td>Review of Government Gateway (Department for Work and Pensions)</td>
<td>Implementation of website rationalisation policy (Central Office of Information)</td>
</tr>
<tr>
<td>Part Three</td>
<td>Review of portals Direct.gov (Cabinet Office) Business.gov (HM Revenue &amp; Customs)</td>
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</table>

### Future trajectory

<table>
<thead>
<tr>
<th>Lessons learnt to help the future</th>
<th>Summary</th>
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<tbody>
<tr>
<td>Future digital landscape</td>
<td>Part Five</td>
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</table>
Part Two

Government Gateway

2.1 In this part we review the Government Gateway (Gateway), which was launched in 2001. Gateway is ICT infrastructure providing a number of essential support services which government websites rely on in order to deliver secure online services. It was developed and managed by the Cabinet Office until it was transferred to the Department for Work and Pensions (DWP) in 2008. By 2011, Gateway was being used by 77 stakeholders, providing 227 live services. Figure 4 overleaf shows its main services, key business processes, technologies and suppliers.

Services provided

2.2 Gateway provides three main and some additional services which stakeholders can incorporate in their online services:

- user registration, enrolment and identity checking for users, as well as for government employees, when signing onto a government online service. This allows users to obtain a single credential, the ‘Government Gateway User ID’, which they can then use to prove their identity to multiple government online services. This is the most heavily used service;

- secure data sharing and transfer of personal or sensitive data between users and government systems;

- a secure payments service to authorise and collect financial payments made by users to government; and

- a range of additional services including customer helpdesk, secure mail and an alert service which stakeholders can incorporate into their own customer services.

2.3 The DWP has a Corporate and Shared Services IT Directorate, which is responsible for Gateway. The Directorate operates a series of planning, development and service management business processes to retain its security credentials and deliver the high level of availability of Gateway that stakeholders demand. Atos Origin and Microsoft are the two major ICT suppliers engaged to deliver Gateway. Gateway is managed alongside the broader ICT infrastructure and services of the DWP.
Figure 4
Service architecture of Gateway

<table>
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<tr>
<th>Users</th>
<th>Stakeholders</th>
<th>Users (businesses)</th>
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<tbody>
<tr>
<td>Strategic investors e.g. DWP, HMRC</td>
<td>Government employees</td>
<td>Local authorities</td>
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<table>
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<th>Over the internet – using supported browsers</th>
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<td>Payments</td>
<td>Citizen registration, enrolment (R&amp;E), authorisation and Employee Authentication Service</td>
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<tr>
<td>Secure data sharing and transfer</td>
<td>Ad hoc services, helpdesk, secure mail and alerts</td>
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<tr>
<td>Secure data sharing and transfer</td>
<td>Ad hoc services, helpdesk, secure mail and alerts</td>
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<th>Business processes</th>
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<td>Department for Work and Pensions (DWP) Government Gateway contract management team</td>
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<tr>
<td>Business and portfolio strategy and commercial management</td>
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<td>Project and service delivery</td>
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<td>Service, solution design and security</td>
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<th>Technology</th>
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<tr>
<td>Government Gateway contract technology (Atos Origin and Microsoft)</td>
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<tr>
<td>DataCash/ financial institutions</td>
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<tr>
<td>Payment servers</td>
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<tr>
<td>GovTalk</td>
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<td>Management server</td>
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<td>Security tokens</td>
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<tr>
<td>Secure ID provider servers</td>
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<tr>
<td>Secure data servers</td>
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<tr>
<td>Customer information service</td>
</tr>
<tr>
<td>Identity providers</td>
</tr>
<tr>
<td>Authentication brokers</td>
</tr>
</tbody>
</table>

Source: National Audit Office
Our analysis

Business model

2.4 Gateway is funded by its stakeholders and is developing its business model so that the costs that stakeholders bear will be directly related to usage. Gateway’s income comes mainly from two government departments, which are the largest stakeholders, HM Revenue & Customs (HMRC) and the DWP. These pay annual fees for the service, while other stakeholders also use and pay for the service. Today, there is no direct relationship between the charges and the usage of Gateway, but the DWP is developing a new ‘pay as you go’ commercial model under which charging will relate to usage, and the full costs of future service improvements will be met by the stakeholder.

2.5 The DWP has secured significant cost reductions since taking over Gateway. It has driven down the annual cost of running Gateway from £28 million in 2009-10 to £22 million in 2010-11 (Figure 5 overleaf). Since DWP took over the management of Gateway in 2008, it has aimed to stabilise the service, reduce internal and supplier costs and minimise new development. The DWP has streamlined its own service management team, replaced contractors with permanent staff and leveraged the DWP’s buying power as a large government purchaser of ICT services to renegotiate the main supplier contract, reducing costs.

2.6 Neither the Cabinet Office nor the DWP has attempted to quantify the benefits Gateway has delivered to stakeholders and users:

- as a shared service, Gateway is likely to have delivered some savings for the local and central government organisations who are its stakeholders, through economies of scale and the avoidance of stakeholders needing to develop and maintain multiple similar services independently, but these have not been quantified; and
- the benefits to users of Gateway are difficult to assess because they are inseparable from the overall benefits of the particular online service users are engaging with – for example, online tax return filing.

Implementing and managing performance

2.7 Between 99.9 per cent and 100 per cent availability of Gateway has been achieved, even during the periods of high peak demand associated with the deadlines for PAYE and self-assessment tax returns. In January 2011, Gateway handled over 2.5 million transactions during this key period for filing self-assessment tax returns, a 7 per cent increase on the previous year. The DWP has a number of key performance metrics, covering each of the services it offers, which are actively reviewed each month.
2.8 Gateway has effective operations management. The service is managed and reviewed at the DWP business service strategy board and there are specific risk forums for certain technical issues. There are formal procedures for gathering and reporting management information and, with the exception of benefits, financial and technical performance data are regularly collected. Furthermore, the senior responsible owner has remained constant since the service moved into DWP, giving continuity and a prolonged period of accountability.

Service management

2.9 Service management processes within Gateway are in line with the industry best practice standard, IT Infrastructure Library (ITIL). Service level charters are in place for all stakeholders, which Gateway reports on monthly and keeps under review. Gateway introduces new services through a comprehensive formal change control process. A set of service level agreements with Gateway’s contractors drive performance and control changes.
2.10 There is little data available on users’ views of Gateway, but there are indications that some users have difficulty with the service. Gateway does not gather users’ views itself, but Directgov has collated some information on Gateway in response to adverse comments from users of Directgov about Gateway. Between March and June 2010, Directgov collated over 230 negative comments about Gateway. These showed that users were confused about what Gateway is, some believing that it is part of Directgov. They have had difficulty both in registering and in making use of their Gateway details once they are registered. Gateway is working with Directgov to identify whether these issues are due to Gateway itself and to address them.

People

2.11 The DWP staff responsible for operating Gateway have the appropriate ICT skills. Gateway is just one of a set of ICT infrastructure services that are operated by the Corporate and Shared Services IT Directorate of the DWP. While it has a relatively small budget, Gateway is able to draw on the management and technical skills (especially design, security and procurement) resources from within the DWP. Access to this expertise has also brought additional rigour into the management and maintenance of Gateway. ICT capabilities in the DWP are measured using the ‘Skills Framework for the Information Age’, a widely-recognised definition of ICT skills. We have reported on this development of the ICT profession across government elsewhere.7

2.12 Challenging organisational changes in the DWP pose a potential risk to maintaining the necessary security and availability. The existing ICT teams are being centralised and rationalised by approximately 50 per cent. There has been a rapid reduction in contractor staff and the gap has been only partially filled by the DWP’s internal staff. However, training budgets have been cut and there is pressure to prioritise across all of the services that this team delivers, including Gateway.

Process

2.13 There are professional business management, development and operational processes in place, which have resulted in improvements. Operating as one service within a broad ICT services department, Gateway benefits from applying ready-made business processes. The Gateway team conducts regular reviews and operates a continuous improvement process. The DWP commissions benchmarking exercises, the most recent of which, in June 2011, identified some aspects of asset management and customer relationship handling that could be improved. The DWP is taking these recommendations forward.

Technology

2.14 The DWP is facing some important choices on security (to ensure the services receive continued accreditation) and storage (so that the high intensity peaks of traffic for HMRC’s self assessment service can be met in January 2012). Gateway’s design and technology is now ten years old and important choices need to be made on technology. There are plans, for example, to invest in 2011-12 in improving security measures to meet weaknesses found during the security accreditation of the service.

Future

2.15 The Government has identified that it needs to modernise user registration, enrolment and identity checking for the public and businesses. The design of a future service is underway in the Cabinet Office’s identity assurance programme. Once operational, this will replace some, but not all, of the services in Gateway. Until this point, Gateway will remain a critical part of shared infrastructure for further government digital services.
Website rationalisation policy

3.1 This part evaluates how effectively the Central Office of Information (COI) has managed website rationalisation on behalf of the Cabinet Office.

Policy and responsibilities

3.2 To improve the way government used the internet, in 2006 the Cabinet Office announced plans to freeze developing new websites, following a review by Sir David Varney. This committed the Government to rationalise its web presence by moving content and services into the two government services, Directgov and Business.gov, and closing surplus sites.

3.3 In 2006, the Cabinet Office began working with departments to begin rationalisation and, in 2007, it began funding a team in the COI to support them. We estimate that the cost to the Cabinet Office of COI’s work has been between £265,000 and £300,000 since 2007. As well as leading the website rationalisation, COI has produced policy and guidance for government websites, in areas such as accessibility, usability design and social media, on behalf of the Cabinet Office.

Our analysis

3.4 Determining how successful the Government has been in closing websites has proved difficult because the baseline numbers were based on an estimate and targets have changed over time (Figure 6 overleaf). At the start of rationalisation, the Government was unsure how many sites it had.

3.5 The COI was unable to provide a Cabinet Office business case setting out the original plan for website rationalisation. In response to recommendations made by the Public Accounts Committee, the COI began collecting data on the costs of government websites in 2009, but the Cabinet Office did not ask the COI to monitor the savings resulting from closure.

8 Sir David Varney, Service Transformation: a better service for citizens and businesses, a better deal for the taxpayer, 2006.

3.6 The COI’s efforts have rationalised the Government’s presence on the internet considerably, delivering financial benefits, but some departments are not complying with the policy. COI reported that, on 1 July 2011, 1,526 websites had been closed. We analysed the data held in the government web archive database and found the total number of websites recorded as closed to be 1,591 at 31 August 2011 (Figure 7). We are aware, however, that, while a freeze exists on developing new sites not officially sanctioned, some parts of government have by-passed COI’s control of the ‘gov.uk’ addresses by setting up sites using different addresses. The number of such sites is not known, but the COI reports that examples included marinemanagement.co.uk (now defunct) and censusjobs.co.uk.10

Future

3.7 Following the announcement of the COI’s closure by April 2012, see paragraph 5.3, page 42, the review of websites, announced in July 2010, will continue as the responsibility of the GDS.
Figure 7
Number of websites closed by stakeholders at 31 August 2011

Stakeholders

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Number of Websites Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>HM Revenue &amp; Customs</td>
<td>14</td>
</tr>
<tr>
<td>HM Treasury</td>
<td>19</td>
</tr>
<tr>
<td>Foreign &amp; Commonwealth Office</td>
<td>27</td>
</tr>
<tr>
<td>Department for Work and Pensions</td>
<td>32</td>
</tr>
<tr>
<td>UK Trade &amp; Investment</td>
<td>32</td>
</tr>
<tr>
<td>Department of Energy and Climate Change</td>
<td>33</td>
</tr>
<tr>
<td>Department for Culture, Media and Sport</td>
<td>35</td>
</tr>
<tr>
<td>Other¹</td>
<td>38</td>
</tr>
<tr>
<td>Department for International Development</td>
<td>49</td>
</tr>
<tr>
<td>Home Office</td>
<td>66</td>
</tr>
<tr>
<td>Department for Communities and Local Government</td>
<td>69</td>
</tr>
<tr>
<td>Cabinet Office</td>
<td>72</td>
</tr>
<tr>
<td>Ministry of Defence</td>
<td>98</td>
</tr>
<tr>
<td>Department for Transport</td>
<td>115</td>
</tr>
<tr>
<td>Ministry of Justice</td>
<td>120</td>
</tr>
<tr>
<td>Department for Education</td>
<td>140</td>
</tr>
<tr>
<td>Department for Environment, Food and Rural Affairs</td>
<td>189</td>
</tr>
<tr>
<td>Department of Health</td>
<td>222</td>
</tr>
<tr>
<td>Department for Business, Innovation &amp; Skills</td>
<td>230</td>
</tr>
</tbody>
</table>

Number of websites closed at 31 August 2011

NOTE

¹ Other includes regulators, arbitrations and websites set up to support national inquiries and regional general government offices.

Source: National Audit Office analysis of government web archive
Part Four

The Directgov and Business.gov services

4.1 In this part we evaluate the Government’s investment in the two major services, Directgov for the public and Business.gov for businesses.

4.2 Both services bring together a range of information and services from stakeholders under a common identity, with clarified text and a consistent appearance. Directgov has a single UK-wide service (www.direct.gov.uk), which when necessary directs users towards information which is specific to England, Scotland, Northern Ireland or Wales. The Business.gov service consists of a ‘family’ of four national services corresponding to the four nations (www.businesslink.co.uk for England, www.bgateway.com for Scotland, www.nibusinessinfo.co.uk and www.business.wales.gov.uk). Business.gov was launched by the former Department for Trade and Industry (DTI) in November 2003, and Directgov by the Cabinet Office in April 2004.

4.3 Figure 8 opposite and Figure 9 on page 30 illustrate the key business processes, technologies and key contractors in respect of Business.gov and Directgov.

Description of services

4.4 Directgov and Business.gov have similar ‘devolved publishing’ models, under which stakeholder staff who are accredited to use the two services’ separate systems can publish material directly onto the sites. Content is grouped into ‘franchises’ (Directgov) and ‘themes’ (Business.gov), and departments take responsibility for content which is related to their work. If no accredited staff are available, quality assurance staff employed by the services themselves review the material before releasing it live. For Business.gov, these staff work for the key contractor, Serco.
Figure 8
Service architecture of Directgov

**Users**
Citizens

**Services**
- Directgov website
- Mobile service
- Social media
- Alpha.gov.uk
- Television channel ceased 31 March 2011

**Business processes**
- Stakeholders providing content for franchises
- Proposition and product strategy
- Communications and engagement
- Product infrastructure and technology
- Publishing
- Business strategy and operations

**Technology**
- Web server (Steria)
- Mobile server (Cimex)
- Web server
- Television (Virgin/Sky)
- Resource management
- aXis
- Mobile platform
- Single domain prototype Alpha.gov.uk
- Television
- Back office systems
- e-Forms
- e-Campaigns

*Source: National Audit Office*
Figure 9
Service architecture of Business.gov

<table>
<thead>
<tr>
<th>Users</th>
<th>Business people</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future businesses</td>
<td>Small/medium businesses</td>
</tr>
</tbody>
</table>

|----------|----------------------------------|-----------------------------|---------------------------------------------|----------------------------------|

<table>
<thead>
<tr>
<th>Business processes</th>
<th>HMRC contract management team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stakeholders provide content for themes</td>
<td>Prime contractor (Serco)</td>
</tr>
<tr>
<td>Proposition and product strategy</td>
<td>Communications and engagement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Technology</th>
<th>Web server (BT)</th>
<th>Tariff Lookup (Arctic)</th>
<th>Contracts Finder (Sequence)</th>
<th>Interactive tools (Serco/BT)</th>
<th>Resource management</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebLogic</td>
<td>WebLogic</td>
<td>WebLogic</td>
<td>WebLogic</td>
<td>WebLogic</td>
<td>Back office systems</td>
</tr>
<tr>
<td>Intertwoven</td>
<td>Oracle DB</td>
<td>Oracle DB</td>
<td>Oracle DB</td>
<td>Oracle DB</td>
<td></td>
</tr>
</tbody>
</table>

Source: National Audit Office
4.5 Directgov and Business.gov provide stakeholders with expertise in developing digital services, along with secure and resilient web hosting platforms. Their business models are similar to conventional shared services with resources, processes, capabilities and infrastructure shared and reused among their stakeholders. Centralising content also enables related advice and guidance from stakeholders to be organised into a series of related themes. For users, this allows access to disparate information in a single place. For example, Directgov’s ‘Money tax and benefits’ section includes guidance on both the Department for Work and Pensions (DWP) benefits and HM Revenue & Customs (HMRC) tax credits.

4.6 In addition to the website, Directgov has a mobile service that is designed for use with ‘smartphones’ and other portable devices. The mobile service is also used by other government services including NHS Choices and the Charities Commission. Until March 2011 it also operated a digital television service, but, due to low usage and the current development of television services available via the internet, this has closed. Business.gov has no mobile or television services.

4.7 Directgov’s services also include:

- syndication of its content to third parties;
- the Directgov ‘innovate’ platform used by developers to share their ideas and demonstrate innovative uses of government data; and
- applications allowing Directgov information to be used and manipulated in various ways for different users’ needs.

4.8 Both services use the ‘social media’ services Twitter and YouTube. Directgov has a presence on the social networking site Facebook, while Business.gov is currently planning to launch on Facebook and the professional networking site LinkedIn.
Our analysis

Business model

4.9 The cost of Business.gov has been consistently higher than Directgov. In 2010-11 the total cost of Directgov was £26.2 million. In the same period, the Business.gov programme cost £33 million. Our analysis of the costs of both services is shown in Figure 10 on page 33, continued on page 34 and Figure 11 on page 35, which also shows the costs of some additional ‘externally funded projects’ that were commissioned by government departments in addition to the main Business.gov programme, focused on website convergence. In every year of Business.gov’s operation, its costs have been greater than those of Directgov. It is, however, difficult to make valid comparisons. For example, while Directgov is available through a wider range of channels, with a mobile channel and, until recently, agreements to distribute its content through digital television, Business.gov provides different services such as the ‘contracts finder’ service enabling businesses to identify government contracts for which they may bid.

4.10 The different operating models for the two services contribute to the cost difference:

- Directgov relies mainly on in-house resources and on a ‘franchise’ system of accredited editors in government departments to produce its content and to develop the site. In contrast, Business.gov delivers its operation through an outsourced contract with Serco, which has cost £150 million for the main Business.gov programme, excluding externally funded projects, during the five-year period 2006-07 to 2010-11. HMRC has controlled the costs of this contract, firstly by negotiating extra unpaid work from Serco worth £1.5 million in 2008-09 and subsequently by commissioning a benchmarking exercise in 2009. This exercise, which found Serco contractual prices were 11 per cent more expensive than comparative services, resulted in HMRC and Serco agreeing rate reductions which delivered additional work within the agreed contract price to a value of £3.9 million in 2009-10 and £4.2 million in 2010-11.

- Business.gov also makes use of a publishing house to prepare content for stakeholders who are not accredited to publish directly to the Business.gov site. In 2010-11, the services of this publisher cost £2.13 million.

11 Externally funded projects include, for example, the ‘Contracts Finder’ service commissioned by Cabinet Office, allowing businesses to search for government contracts.
Figure 10
Directgov costs and Business.gov costs

Directgov costs
£ million

Source: National Audit Office analysis of Directgov and Business.gov data
4.11 There is no evidence of quantified benefits for stakeholders. The stakeholders do not pay to put their content onto the services. They gain economies of scale and avoid procurement costs, but these benefits have not been quantified. The types of savings we would expect to result from use of the services would include reduced costs for website design, hardware, software and supporting staff.
4.12 Only Business.gov has conducted exercises to determine its benefits for users. Directgov has been unable to identify what financial benefits it has delivered. Business.gov does not attempt to calculate savings it has delivered to departments but it does estimate how much financial benefit it delivers to users based on a series of surveys. These ask users to estimate time saved, money saved, sales and profitability through using Business.gov. In 2010-11 the exercise, which has been validated by HM Revenue & Customs’ data analysis specialists, identified total benefits of £668 million. While we are supportive generally of efforts to measure benefits, we are cautious about this figure because:

- it is impossible to say how much of the benefit would have been delivered anyway, if business people had obtained the information through the multiple websites from which Business.gov has taken content; and
- the assessment of benefits includes estimates of time and money saved, and also sales and profit increases as a result of using the site. For the latter two, it is difficult to be sure that sales and profit increases are associated specifically with actions taken as a result of using the website.
4.13 Like Business.gov, Directgov’s business model delivers most of its benefits to departments rather than to itself. Directgov told us that they have found it impossible to model benefits because departments generally did not have robust financial analyses of benefits. Despite the two services costing in total more than £50 million per annum, no one in government is accountable for realiseing departmental savings arising from the work of the two services.

Implementation and performance management

4.14 Both services met their targets for moving government websites onto their own sites, but it is unclear what savings have been achieved. At the beginning of 2008-09, the Cabinet Office set Directgov a target of converging 95 per cent of public-focused content within three years. Business.gov had a similar target for business-facing content. By the end of the period, both targets were achieved (Figure 12 and Figure 13). Directgov converged 287 websites while Business.gov converged 175 sites. Despite these successes, we have been unable to identify what this exercise has delivered in terms of savings. It is also clear that, following convergence, some departmental and agency websites have remained open.

**Figure 12**

Directgov performance metrics

<table>
<thead>
<tr>
<th></th>
<th>2006-07</th>
<th>2007-08</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business outcomes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Website convergence projects completed</td>
<td>Convergence programme not yet started</td>
<td>21</td>
<td>132</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td><strong>Website performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability (%)</td>
<td>99.7</td>
<td>99.8</td>
<td>99.9</td>
<td>99.9</td>
<td>100</td>
</tr>
<tr>
<td>Security incidents</td>
<td>n/a</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Visits to the Directgov core site (million)</td>
<td>40</td>
<td>66</td>
<td>89</td>
<td>143</td>
<td>187</td>
</tr>
<tr>
<td>Visits to all Directgov sites (million)</td>
<td>40</td>
<td>71</td>
<td>125</td>
<td>248</td>
<td>325</td>
</tr>
<tr>
<td><strong>Customer and stakeholder views</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customers’ satisfaction (%)</td>
<td>84</td>
<td>80</td>
<td>79</td>
<td>77</td>
<td>72</td>
</tr>
<tr>
<td>Stakeholders’ satisfaction (%)</td>
<td>n/a</td>
<td>n/a</td>
<td>76</td>
<td>71³</td>
<td>60</td>
</tr>
<tr>
<td><strong>Unit cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost per visit, core site (£)</td>
<td>0.33</td>
<td>0.22</td>
<td>0.32</td>
<td>0.20</td>
<td>0.14</td>
</tr>
</tbody>
</table>

**NOTES**

1 Where data is unavailable n/a is shown.

2 Figures for the number of visits per year to all Directgov sites include Directgov branded sites such as jobseekers.direct.gov.uk. The sites had a total of more than 30 million visits per month by November 2011.

3 The stakeholder satisfaction figure of 71 per cent for Directgov in 2009-10 is based on a survey carried out in July 2010, after the end of the financial year 2009-10.

**Source:** National Audit Office analysis of Directgov metrics
4.15 While both services achieved website convergence, satisfaction levels declined among users of Directgov and stakeholders of both services. The website convergence programme required managing considerable change by both Directgov and Business.gov, throughout the three years up to 2010-11. During this period, both gathered feedback from their users and stakeholders. Our analysis of this data found that, by the end of 2010-11, user satisfaction (referred to as ‘customer satisfaction’ in the services’ data and in Figures 12 and 13) declined for Directgov but increased slightly for Business.gov. However, satisfaction levels among stakeholders decreased for both in 2010-11. For Directgov, 60 per cent of stakeholders agreed with the statement ‘I am satisfied with Directgov’s website’, down from 71 per cent a year earlier. From our engagement with Directgov, we believe a contributory factor was stakeholders’ frustration with the system used to publish their content onto the Directgov website. For Business.gov, satisfaction – the number of stakeholders who rated the service as ‘satisfactory’, ‘good’ or ‘excellent’ – reduced from 90 per cent to 85 per cent.
4.16 Directgov’s ability to understand its costs in detail has been limited by its reliance on host departments’ financial management systems. Effective financial management is crucial to corporate governance and to ensuring resources are controlled. Directgov monitors spend against its budget as a whole, and spending with its managed service providers is agreed and tracked through change control processes. However, the Directgov resource costs on individual projects are not known since host departments’ systems have not been configured to do project accounting.

Service management

4.17 Both services have set high levels of service availability and met them. Directgov management told us that as it is the Government’s presence on the web, the service should be available 100 per cent of the time. Both have consistently maintained availability to users at more than 99 per cent (Figures 12 and 13).

4.18 Both services have governance and control frameworks designed to maintain the quality of published content. For Directgov these include ‘preventive’ systems of quality assurance, editor accreditation and a publishing board. In addition, ‘detective’ controls pick up any issues once content is published, including user surveys and a feature introduced in March 2010 that allows users to comment on every article published on the service. Business.gov has similar structures and systems.

People

4.19 Directgov has relied upon interim staff to deliver many of its capabilities. In contrast, since the Business.gov service is largely outsourced, responsibility for recruitment and retention rests with its contracting partners who can draw on a wide base of technical expertise. For the financial years 2008-09 and 2009-10, spend on Directgov interim staff was more than twice that of civil service staff (Figure 14). This investment in contractors was undertaken because of the difficulty Directgov was having recruiting permanent staff. We believe this is linked to civil service pay constraints. Our analysis of market pay rates for a range of ICT and digital jobs suggests many require remuneration rates within the pay bands of senior civil servants in order to attract people with the required skills (Figure 15 on page 40), which means that government departments often need to recruit ICT specialists on a contract rather than a permanent basis. For example, the pay range for the first band for senior civil servants is between £58,000 and £117,000 per annum. Our analysis suggests that market rates for a range of experienced permanent ICT positions are between £65,000 and £97,000, but these are specialist operational roles rather than the broader policy and management responsibilities civil servants at this grade would normally have.
Process management

4.20 Both services have well-defined processes but there are weaknesses in the usage of information from Directgov’s helpdesk. Directgov and Business.gov’s key processes relating to publishing, editor accreditation and quality assurance are fully documented with formal relationships with stakeholders. However, Directgov’s management does not routinely request analysis of emails to its helpdesk. They do not apply metrics to the performance of the helpdesk, which is operated using an MS Outlook system rather than a specific helpdesk application. This makes it harder to prioritise calls, to assign ownership to a staff member or to track progress. Directgov does, however, use its ‘comment on this article’ feature to report significant increases in usage to the management team and to inform stakeholders of user feedback on particular issues.

Business.gov added a ‘user support tool’ to the service in May 2011 and has seen a decrease in user queries as a result.
The separate software systems used by each service require stakeholders to put their staff through separate training and accreditation processes. Each service has its own ‘content management system’, which stakeholder staff need to be trained in before they can prepare their content for the services. Accredited stakeholder staff can publish content onto the services without needing to pass through the services’ quality assurance processes.

### Figure 15
Market rates of pay for ICT and digital jobs and pay bands for senior civil servants

#### Market rates of pay for ICT and digital jobs

<table>
<thead>
<tr>
<th>Role</th>
<th>Permanent salary (£)</th>
<th>Contract daily rate (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web architect</td>
<td>65,000</td>
<td>425</td>
</tr>
<tr>
<td>Technical architect</td>
<td>70,000</td>
<td>500</td>
</tr>
<tr>
<td>Senior project manager</td>
<td>70,000</td>
<td>575</td>
</tr>
<tr>
<td>Testing manager</td>
<td>90,000</td>
<td>525</td>
</tr>
<tr>
<td>Senior programme manager</td>
<td>97,500</td>
<td>688</td>
</tr>
</tbody>
</table>

UK London rates as at 3 months to 9 September 2011.

*Source: [www.itjobswatch.co.uk](http://www.itjobswatch.co.uk)*

#### Pay bands for senior civil servants

<table>
<thead>
<tr>
<th>Pay Band</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCS1</td>
<td>58,000</td>
<td>117,000</td>
</tr>
<tr>
<td>SCS1A</td>
<td>67,600</td>
<td>128,900</td>
</tr>
<tr>
<td>SCS2</td>
<td>82,900</td>
<td>162,500</td>
</tr>
<tr>
<td>SCS3</td>
<td>101,500</td>
<td>208,100</td>
</tr>
<tr>
<td>Permanent secretary</td>
<td>141,836</td>
<td>277,349</td>
</tr>
</tbody>
</table>

*Source: Cabinet Office*
Technology

4.22 Both services have delivered good levels of security, with no reported incidents, such as viruses and attempts to alter or close down the service, in the past two years (Figures 12 and 13). It is important to note, however, that the services are not responsible for security threats such as fraud within the transactional services they support, and the reported numbers of security incidents do not include these. For example, incidents related to HMRC’s online tax filing services are monitored by HMRC itself.12

4.23 We have noted the high levels of stability achieved by both services. The services are built on technology that is reaching the end of its life suggesting that the technology purchased was appropriate for its time. However, there are examples where applications, such as Directgov’s content management system, are increasingly failing to meet the expectations of some stakeholders.

Future

4.24 Directgov created a prototype website www.alpha.gov.uk, to demonstrate the benefits of designing government’s online services around user needs. The project used an ‘agile’ development approach, which developed the system using multiple, small, iterative steps. This was launched in May 2011 at a cost of £327,000. Betagov is the successor to Alpha.gov and is intended to become the ‘single domain’ for the Government to be launched in 2012. This is currently in development.

Government’s future digital landscape

5.1 In this part we examine government plans for future digital services and the role of the Government Digital Service (GDS), which was launched in March 2011. A new Executive Director for Digital from the private sector was appointed in July 2011 to lead the GDS. At the time of our review, the GDS’s plans were at an early stage and there was no approved business case. However, the GDS is taking responsibility for all publishing, policies, common services and ICT services that relate to digital. Some existing policies and services may continue, but it is likely that many will be replaced.

New services under GDS responsibility

5.2 At the time of writing, several new digital services were already under development:

- in March 2011, the Cabinet Office began a programme to develop a ‘federated identity assurance service’ for government. This new approach will be driven by users choosing to validate their identity through ‘certified identity providers’ in the private sector, such as banks and building societies, rather than the government-owned single identity service which Gateway currently provides. A number of high-profile government programmes depend on a successful launch of this new service, most notably the Universal Credit programme, where online access will be the primary channel to claim new benefits from October 2013;

- the first ‘citizen engagement’ service went live in July 2011 with the launch of e-petitions, a service which allows the public to petition government online; and

- Betagov, which will become the Government’s single source of government information on the internet (‘single domain’) is in development. This service will support news, policy announcements and consultations.

Changing ownership of digital policies

5.3 With the creation of the GDS, the Government has an opportunity to develop digital policy. It has been announced that the Central Office of Information (COI) will close by April 2012 and some elements of its policy work may transfer to the GDS. The GDS is also responsible for policy across the Government on ‘digital inclusion’ of people who do not currently use computers or the internet. It will set standards for the provision of ‘assisted digital’ services, such as training in internet use, to support the ‘digital by default’ agenda.
Race Online 2012

5.4 The GDS is also supporting the ‘Race Online 2012’ campaign, an initiative launched by the UK Digital Champion, Martha Lane Fox in April 2010. This encourages those already online to volunteer, donate money or organise events to help the digitally excluded. The GDS is providing £650,000 in funding in 2011-12.

Improvements to digital services in the future

5.5 Figure 16 overleaf illustrates how the GDS is starting to integrate existing and emerging services and policies into its digital strategy. If successful, the public and businesses will experience a step change in the usability of digital services, while taxpayers will see lower costs of delivery.

5.6 Figure 16 shows how the GDS intends to place a greater emphasis on the views of users when designing services. Early GDS plans indicate that it will continue to differentiate between consumer and business services, will take a more proactive role in designing better user-oriented services for stakeholders, and will expect innovation to feature more prominently.

5.7 The Government has advised us that it expects its use of social media to grow. Public services and information will increasingly be delivered to those areas of the internet used by particular communities or target audiences, for example, websites used by new mothers or young people.

5.8 The GDS is also responsible for policies to help reduce the number of digitally excluded people. Around 8.7 million people have never been online\(^\text{13}\) and GDS leadership across government will be essential to manage the risk that some communities and sections of the population remain unable to gain access to public services.

5.9 The roll-out of high-speed broadband, supported by Broadband Delivery UK, is an essential component to enable user access. It was jointly launched in December 2010 by the Department for Culture, Media and Sport and the Department for Business, Innovation & Skills, who have provided £830 million of public funding.

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Figure 16
A view of the Government’s digital landscape

Government Digital Service

Users

Putting the users first

Race Online 2012

gov.uk services

Consumer services
- single domain prototype
  Alpha.gov.uk
- Directgov

Business services
- Business.gov

Transformation services
- transforming service design
- hands-on in departments and agencies

Innovative services
- e-petitions

Platforms

Shared ICT infrastructure

Publishing platform
Business.gov

Transactions platform
Gateway

Analytics platform

Identity platform
ID assurance programme

Policies and strategies

- website rationalisation
- user driven

Supported by high-speed broadband roll-out

Source: National Audit Office
## Appendix One

### Methodology

<table>
<thead>
<tr>
<th>Method</th>
<th>Purpose</th>
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</table>
| Application of our analytical framework (see Appendix Two) to Gateway, Directgov and Business.gov. For each service, this was based on:  
  - interviews with a range of senior and operational staff, including key contractors and other external stakeholders;  
  - document review covering a range of policy, strategy and operational documents;  
  - financial and quantitative analyses. | To evaluate the operational performance of these services. |
| Interviews, document review and data analysis relating to the website rationalisation programme operated by the COI on behalf of the Cabinet Office. | To evaluate the programme’s achievements, costs and delivery issues and its links to the Directgov and Business.gov convergence objectives. |
| Interviews and document review relating to the Government’s new digital strategy, the development of the Government Digital Service and plans for the ‘single domain’. | To understand the future direction for digital strategy and its likely effects on the existing services. |
| Review of private sector literature and research. | To set government’s digital strategy in context and gather information on best practices and potential benchmarks. |
## Appendix Two

### Analytical framework

#### Economy

<table>
<thead>
<tr>
<th>Business model</th>
<th>There is a clear strategy and governance in place.</th>
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<tbody>
<tr>
<td></td>
<td>The strategy is owned and communicated.</td>
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<td></td>
<td>Costs of service are known, realistic and managed.</td>
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<td></td>
<td>Benefits are quantified.</td>
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<td></td>
<td>Funding supports existing and future needs.</td>
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</table>

#### Effectiveness

<table>
<thead>
<tr>
<th>Implementation and performance management</th>
<th>A project plan exists that is well managed and appropriate lifecycle management is in place.</th>
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<tbody>
<tr>
<td></td>
<td>There is a defined target operating model in place.</td>
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<td></td>
<td>Performance is managed against defined criteria in the target operating model.</td>
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<td></td>
<td>The operating model takes account of stakeholder and user perspectives.</td>
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<tr>
<th>Service management</th>
<th>An effective service management regime is operating.</th>
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<td></td>
<td>Service definitions are continuously reviewed and improved in liaison with stakeholders and users.</td>
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<tr>
<td></td>
<td>Multiple stakeholders and users are engaged in service management and evolution.</td>
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<tr>
<th>People</th>
<th>Skills are appropriate to manage operations as well as change.</th>
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<td></td>
<td>Stakeholder and user-facing staff are trained in service management and customer management disciplines.</td>
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<td></td>
<td>Operations staff have sufficient professional project and change management capability to meet the needs of customers on boarding and service management.</td>
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<td></td>
<td>End users and stakeholders are fully trained.</td>
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<td></td>
<td>Capability is nurtured and developed and resource planning is effective.</td>
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<tr>
<td>Efficiency</td>
<td>Process</td>
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<td>-----------------</td>
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<tr>
<td></td>
<td>There is clear end-to-end process definition, control and ownership.</td>
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<td>Accountabilities and responsibilities are clear.</td>
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<td></td>
<td>Process definitions reflect underlying systems architecture.</td>
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<td>Process owners apply defined processes, performance manage and</td>
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<td></td>
<td>undertake improvement activities.</td>
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Appendix Three

National Audit Office reports focusing on government ICT
Published cross-government ICT reports

A snapshot of the government’s ICT profession in 2011, October 2011

ICT in government landscape review, February 2011

This VFM report

Digital Britain One: Shared infrastructure and services for government online, December 2011

Published client reports, focused on ICT

Ministry of Defence: The use of information to manage the logistics supply chain, March 2011

The National Programme for IT in the NHS: an update, May 2011

The failure of the FiReControl project, July 2011

HM Revenue & Customs: The expansion of online filing of tax returns, November 2011

Shared services in the Research Councils, November 2011

Department for Environment, Food and Rural Affairs: Geographic information strategy, July 2011

Source: National Audit Office
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