

Measuring website costs

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Purpose

This guidance equips central government departments with a common method for measuring the cost of websites, providing the first step in determining value for money. This enables departments to answer Parliamentary Questions and Freedom of Information requests about expenditure on websites consistently and accurately.

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Introduction

Purpose

This guidance equips central government departments with a common method for measuring website costs, providing the first step in determining value for money. This enables departments to answer Parliamentary Questions and Freedom of Information requests about expenditure on websites consistently and accurately.

This information will also aid departments and site owners in planning budgets, justifying investment and allocating resources. An accurate understanding of the costs of websites enables departments to evaluate the return on investment provided by websites. It equips government communicators to better understand the role that digital communications play in the full communications mix.

Background

The provision and use of government websites has grown very significantly in recent years. Central government must ensure that this online presence is both effective and efficient, providing high quality services and information for citizens at a reasonable cost.

The National Audit Office surveyed 153 central government organisations between October and December 2006 for the report [Government on the Internet](#)¹. Over a quarter of organisations did not provide the costs of website provision.

The Government has agreed to the [Public Accounts Committee \(PAC\) Sixteenth Report](#)² recommendation that a methodology for identifying the costs of websites needs to be developed. This guidance details that method.

Additionally the PAC recommended that a single set of website usage metrics and quality measures be identified. These requirements will be covered in two separate pieces of guidance. These three pieces of guidance provide central government departments with a set of common tools to evaluate the cost-effectiveness of websites.

¹ Government on the internet: progress in delivering information and services online
http://www.nao.org.uk/publications/0607/government_on_the_internet.aspx

² Public Accounts Committee – Sixteenth Report
<http://www.publications.parliament.uk/pa/cm200708/cmselect/cmpubacc/143/14302.htm>

Audience

This guidance is intended for Heads of e-Communications (or equivalent) within central government departments, executive agencies and non-departmental public bodies (NDPBs). It is anticipated that they will be assisted by:

- Finance officers
- Web teams

Reporting requirements

1. Costs must be reported for each and every publicly accessible website operated by an organisation. Websites must be referred to by their individual URL.
2. Costs and internal staffing must be reported for each individual website. This information is required on a per-website basis to show how different websites use varying levels of resource. Reporting per website is consistent with other website evaluation including usage metrics and quality measures. It promotes an understanding of cost-effectiveness for each site that could not be achieved by reporting website costs for the whole department.
3. Websites restricted to particular groups of users by user registration and passwords are excluded from the reporting requirements. For example, the publicly accessible [COI website](#)³ must be reported on but the [COI TV Fillers site](#)⁴ is excluded from reporting because its use is restricted to broadcasters, who must register to view the site. Extranets and internal sites such as intranets and portals are also excluded from this reporting.

When does reporting begin?

4. Central government departments must measure costs starting from 1 April 2009 for every website open on 1 April 2010. The first report will cover the Financial Year 2009-10.
5. Executive agencies and NDPBs must measure costs starting from 1 April 2010 for every website open on 1 April 2011. The first report will cover the Financial Year 2010-11.
6. Annual costs must be provided to COI for the preceding financial year. Audited accounts for the department may not be available until later in the year, however this reporting does not require figures from the audited accounts. One report must be submitted for each website operated by the organisation. These reports are to include expenditures and staffing.

Convergence

7. Costs for websites that have been converged during the reporting year must be reported under the site to which the website has been converged. For example, if central government Site A is to close by 1 April 2010 and the content is to be moved to Site B by 1 April 2010, the reporting for Site B must include the costs of converging Site A, and any expenditures and staff costs

³ Central Office of Information <http://www.coi.gov.uk/>

⁴ COI Online Fillers <http://www.coitvfillers.co.uk> (which will close as part of the Cabinet Office website review)

incurred by Site B through the year. Convergence activity may be noted in the commentary accompanying the report.

8. Websites moved by the end of the reporting year to Businesslink or Directgov should be reported by the department that originally created the site only if this department continues to host and maintain the front-end. The reported figures must include the costs of convergence activity. Details of the management of such sites may be noted in the commentary.
9. The costs of websites previously owned by a department, but for which the front-end is maintained by Businesslink or Directgov by the end of the reporting year, must be reported by Businesslink or Directgov.
10. Departments supplying ongoing content to Directgov or Businesslink should provide costs for this activity to Directgov or Businesslink.

Publishing and sign off

11. Reported costs will be published in the Transformational Government Annual Report. Accompanying commentary submitted by departments will not be included. General commentary on the reported costs may be included. Reports will also be made available to the National Audit Office and the Public Accounts Committee with appropriate commentary, if requested.
12. Heads of e-Communications must obtain any necessary approval from their Director of Communications, Director of Finance and Chief Information Officer (CIO) for the reports being submitted.

Cost measures in detail

Website cost categories

13. Website costs can vary significantly during the lifecycle of a site. Breaking down website costs into major categories of activity demonstrates how the costs of a site are affected by its lifecycle.
14. This guidance splits the expenditures incurred by websites into the following five categories. [Internal staff costs](#) are to be reported separately. The costs included in each category are detailed in the [Website costs catalogue](#).
 - [Strategy and planning](#). This includes strategic work before the website is built or redeveloped, ongoing planning and project management.
 - [Design and build](#). The creative and technical work in producing or updating the website.
 - [Hosting and infrastructure](#). The ongoing software, hardware and hosting costs associated with the website.
 - [Content provision](#).
 - [Testing and evaluation](#).
15. Total expenditure for each of these categories must be reported using the template provided. Reporting a cost for each individual element is not required. The [costs catalogue](#) lists the elements which may have been incurred within each category of work. Expenditure on the cost elements that have been incurred by the website in question must be included in the reported figure.
16. Each cost category may be accompanied by commentary to provide any significant detail about the figure. Commentary must include significant activities for which costs cannot be found and are not reported. Activities can be referred to using the [costs catalogue](#) numbering. Commentary about the whole report may also be submitted.
17. A website may not have incurred expenditure against all of the cost elements listed, in which case only the relevant costs must be reported.
18. Websites may involve costs that are not included in the [costs catalogue](#), hence the inclusion of “Other Costs” at the end of each list. The reported figure must include any other costs for that category of work. If this is a significant cost it may be noted in the commentary.

19. The costs catalogue is a live, ongoing document and subject to change over time. If you would like to add a website cost element to the list, please email webguidelines@coi.gsi.gov.uk.
20. There will be variance across websites depending on the structure of resources, particularly between websites created and managed in-house and websites outsourced to external suppliers. This may be discussed in the commentary accompanying the report. In the case of websites created and managed in-house, many activities will be covered by the internal staff report and must not be reported as website costs. In these cases the [costs catalogue](#) can serve as a checklist to ensure all the work done internally on websites is taken into account in the staff report.

Internal staff costs

21. The use of internal staff to develop and maintain websites varies considerably across government and is in many cases a significant resource. Therefore, the quantity and level of internal resource must be captured in order to understand the full extent of the resource used by a website, and must be reported for each individual website. The [costs catalogue](#) provides lists of the activities involved in website provision, which can be used to ensure all the relevant staff are included.
22. Staff who spend more than half their time working on the website must be reported in the form of the number of full-time equivalents (FTEs) at each grade level.
23. Staff included in the reporting may extend outside the official “web team” to include staff working in communications, IT, policy or other functions. They may not necessarily work on websites full-time. They will perform the activities found in the [costs catalogue](#), for example project managing a website build and launch; liaising with a web agency; playing a large role in creating and managing website content; managing site testing and evaluation.
24. The costs of any contractors or temporary staff that play a central role in a website must be reported as costs in the appropriate category. For example, the cost of a freelance web developer must be reported under Design and Build. The costs of a temporary project manager must be reported under Strategy and Planning.
25. Reporting must allocate the time spent by internal staff across websites as accurately as possible. Wherever possible, the estimated allocation of staff time to individual websites should be captured.
26. Where there is no meaningful method to achieve this, the total time spent by employees on websites must be split across individual websites, and noted in the accompanying commentary. For example, if it is reasonably clear that of

three sites, site A uses twice the time of each of site B and site C, the internal staff costs must be reported in that ratio.

27. Many staff within an organisation may be involved in content provision as a relatively small part of their role. Attempting to measure how many people, and how much of their time, are involved in content provision is likely to be a difficult task with inaccurate results. Therefore, staff who spend less than half their time working on content for the Web may be excluded from the internal staff report.
28. The full cost of internal staff including overhead has not been requested. The calculation of the full cost of a member of staff including overhead is not readily available to many Heads of e-Communications. The estimated total cost of internal staff, including salaries and overheads, will be calculated from the reported FTEs by COI.
29. The estimated full staff costs will be created using the most recent figures for [civil service salaries](#)⁵ published by the Office of National Statistics and an uplift figure to calculate overhead. If the uplift figure used by your organisation is available, it must be reported in the appropriate section of the reporting template.
30. If the departmental uplift figure is not available, a standard uplift figure will be used. 42% of staff salaries will be added to the salary to cover additional staff costs including National Insurance and pension. 100% of this figure will then be added to cover all other overheads. For example, a person on a £30,000 salary has additional staff costs of 42% (£12,600), making £42,600. 100% overheads on top of this produces a final figure of £85,200.
31. All external resource must be reported under the appropriate cost category. This resource may on occasion be provided by COI as a service provider, in which case it must be reported as an external cost and noted in the commentary. The costs catalogue can be used to ensure the relevant cost is captured.

IT costs

32. IT costs are likely to represent a significant component of website costs. Wherever IT costs are available, these costs should be reported in the 'Hosting and infrastructure' category for each website.
33. Where it is not possible to allocate IT costs to each website, they should be split equally across all websites, and this should be noted in the commentary.

⁵ Office of National Statistics Civil Service Statistics
<http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=2899&Pos=&ColRank=1&Rank=422>

34. In some cases, website IT costs may be part of an overarching IT contract in which the website-related components are not itemised. In this case, IT suppliers should be asked to provide the desired cost breakdown. If this is not achievable at a reasonable cost, the IT costs should be excluded and this must be made explicit in the accompanying commentary.
35. Servers and other substantial pieces of hardware are tangible assets and their depreciated cost must be reported. All depreciated costs incurred in the reporting year must be reported. This is likely to include the cost of hardware purchased in previous years.
36. Depreciated costs are the costs of fixed assets (e.g. hardware) amortized, or split, over the life of the assets. For example, if a server costs £3000 and has a life of 3 years, the depreciated cost will be £1000 per year. Finance teams should be able to provide these figures.

Content provision

37. Government websites contain web-only content and cross-channel content. They may contain:
- a) content that is created specifically for the website and does not appear on other channels (e.g. a video shot exclusively for online use);
 - b) content that is created for the website and other channels (e.g. video shot for a TV advertisement and online use);
 - c) content that is created for other channels and then added to the website subsequent to its primary use (e.g. a leaflet distributed by direct mail, then added to the website for reference).
38. Costs of producing content type a) must be reported because this content has been created specifically for the website. The full cost of providing this content must be reported under content provision. This content may take the form of text, images, video and further formats detailed in the content provision section of the costs catalogue.
39. Reporting must exclude costs of producing content types b) and c). This content would typically have been created independently of the existence of the website, and therefore its costs fall outside the scope of this guidance.
40. Costs of converting offline content for online use must be reported because they relate specifically to the website. For example, the cost of preparing PDFs for use online by adding accessibility features is included. The costs of typesetting, proofing and printing PDFs are excluded.

Transactional content

41. Costs of fulfilling transactions must be excluded from reporting.
42. Central government websites provide information and services on 3 levels:
- a) **Content.** Information provision that does not require end user input. For example text, video and podcasts.
 - b) **Tools.** Interactions that require end user input but do not result in a state change (i.e. a change in the information that the government holds on the user). Examples include all types of search, such as the Directgov [job search](#)⁶ and [school finder](#).⁷
 - c) **Transactions.** Interactions that require end user input and result in a state change, such as HMRC [Self-Assessment Tax Return](#).⁸
43. Content and tools are typically created for a website specifically and therefore must be reported as website costs. The considerations about materials created primarily for the website, detailed in [Content provision](#) above, should be additionally noted.
44. The cost of fulfilling transactions must be excluded from the report. This is not a website cost because the service would be provided through other channels if the website did not exist. Example channels include Post Offices and call centres.
45. Costs of providing the online interface to the transaction must be reported because this is a cost incurred by the website specifically. For example, for the HMRC Self-Assessment Tax Return, the costs of creating and hosting the interface must be reported, but the back-end systems that process the data and offline support for users must not.
46. The following diagram shows the components of transactional costs that must be included in the report. The cost of content, tools and transaction interfaces must be included. The cost of transaction back-ends must be excluded.

⁶ Directgov jobs and skills search <http://jobseekers.direct.gov.uk>

⁷ Directgov school, childcare and nursery finder <http://schoolsfinder.direct.gov.uk>

⁸ <http://www.hmrc.gov.uk/online/>

Include in reporting			Exclude from reporting
Content	Tools	Transaction interfaces	Transaction back-ends
			e.g. User support
			e.g. Data processing

Traffic-generating activity

47. The costs of search engine optimisation must be reported in the 'Design and build' category. Search engine optimisation is an integral part of the cost of running a website to ensure potential users can easily access it.
48. Other costs for driving traffic to the website must be excluded from the reporting. Government communicators use multiple methods to encourage site traffic, online and offline. The purpose of this activity is often to draw attention to specific campaigns or to encourage visitors to perform a particular action. Driving traffic to the website in general is thus not the core purpose of these activities. Accordingly, all of these costs, whether online or offline, must be excluded from the reported figure.

Appendix A: Reporting template for each website

Site details	URL		
	Department		
	Description		
External costs		Cost in £000s	Commentary
	Total cost		
	Strategy and planning		
	Design and build		
	Hosting and infrastructure		
	Content provision		
	Testing and evaluation		
Internal staff		Number of full-time equivalents	Commentary
	SCS		
	Grade 6 or equivalent		
	Grade 7 or equivalent		
	SEO/SIO or equivalent		
	HEO/IO or equivalent		
	EO/AIO or equivalent		
	AO/PS/SB1 or equivalent		
	AA/SGB2 or equivalent		
	Other		
		Percentage uplift	Default
		Uplift figure for additional employment	42%
		Uplift figure for overhead	100%
Further commentary			
Contact details	Name		
	Email Address		
	Telephone		

Appendix B: Website costs catalogue

Website activities have been grouped into 5 categories for this reporting:

- Strategy and planning.
- Design and build.
- Hosting and infrastructure.
- Content provision.
- Testing and evaluation.

The lists are intended to be used as a checklist for compiling cost figures. Each individual activity or cost does not need to be reported on individually.

The costs have been numbered for ease of reference in compiling the reporting figures. Please use this numbering in the commentary. For example, please reference online surveys within strategy and planning as 1.2.1.

Websites may incur costs that are not listed here. Such costs should be included in the appropriate category.

1. Strategy and planning

This includes strategic planning before the website is built and ongoing planning and project management.

- 1.1. Strategy development
- 1.2. Research feeding into to website strategy and design, which could take the form of:
 - 1.2.1. online surveys
 - 1.2.2. user research
 - 1.2.3. trends analysis benchmarking
 - 1.2.4. interviews
 - 1.2.5. focus groups
 - 1.2.6. other research methods
- 1.3. Specification of requirements
- 1.4. System architecture planning
- 1.5. Documentation
 - 1.5.1. technical specifications
 - 1.5.2. creative specifications
- 1.6. Procurement
- 1.7. Supplier management
- 1.8. Project management

- 1.9. Ongoing site management
- 1.10. Decommissioning, including:
 - 1.10.1. archiving old versions
 - 1.10.2. re-directs
 - 1.10.3. transferring domain
 - 1.10.4. paying off contracts
- 1.11. Convergence, including:
 - 1.11.1. project management
 - 1.11.2. technical requirements
 - 1.11.3. rationalising content
 - 1.11.4. retaining URLs in perpetuity
- 1.12. Other costs

2. Design and build

The creative and technical work involved in producing a website.

- 2.1. Creative, which may include:
 - 2.1.1. inspiration work
 - 2.1.2. creative research
 - 2.1.3. moodboards
 - 2.1.4. creative concepts
 - 2.1.5. presentations of creative work
 - 2.1.6. rolling out creative treatments
- 2.2. Design, which may include:
 - 2.2.1. information architecture
 - 2.2.2. wireframes
 - 2.2.3. greyboxing
- 2.3. Prototyping
- 2.4. Programming
- 2.5. Integration and configuration
 - 2.5.1. with existing back-end systems
 - 2.5.2. script configuration
- 2.6. Compliance with government web standards
- 2.7. Accessibility work
- 2.8. Usability work
- 2.9. Bug fixes
- 2.10. Revisions
- 2.11. XML sitemaps
- 2.12. Adding semantic markup
- 2.13. Search engine optimisation, which may include:
 - 2.13.1. work intrinsic to the design and build of the site
 - 2.13.2. keyword strategy and implementation
 - 2.13.3. ongoing reporting
- 2.14. Building website components, which may include:
 - 2.14.1. text

- 2.14.2. images
- 2.14.3. video
- 2.14.4. audio
- 2.14.5. animation
- 2.14.6. downloads
- 2.14.7. other language versions
- 2.14.8. readers/plug-ins
- 2.14.9. search
- 2.14.10. online tools
- 2.14.11. online transactions (see notes on Transactional content)
- 2.14.12. RSS feeds
- 2.14.13. embedded licensed content e.g. Multimap
- 2.14.14. feeds from external sites
- 2.14.15. subscriptions
- 2.14.16. e-cards
- 2.14.17. interactive presentations
- 2.14.18. forums
- 2.14.19. webchats
- 2.14.20. blogs
- 2.14.21. wikis
- 2.14.22. social bookmarking
- 2.14.23. tagging
- 2.14.24. Twitter
- 2.14.25. Flickr
- 2.14.26. YouTube
- 2.14.27. Facebook
- 2.14.28. Bebo
- 2.14.29. e-petitions
- 2.14.30. surveys
- 2.14.31. "rate this page"

NB This list covers the costs for building these components into the website. It excludes creating the content for these components of the site, which must be reported in the [Content provision](#) category.

- 2.15. Ongoing development costs
- 2.16. Other costs

3. Hosting and infrastructure

The software, hardware and hosting costs associated with the website.

- 3.1. Hosting
- 3.2. Bandwidth
- 3.3. Servers, either rented or purchased (see note on hardware in [IT costs](#))
- 3.4. Server software
- 3.5. Domain name registration
- 3.6. Telecoms costs

- 3.7. Streaming costs
- 3.8. Software purchased specifically for use relating to a website
- 3.9. Support and maintenance
 - 3.9.1. hardware support
 - 3.9.2. hardware maintenance
 - 3.9.3. software support
 - 3.9.4. software maintenance
- 3.10. Project environments e.g. online collaboration tools
- 3.11. Back-end components of site, which may include licensing existing systems or building new bespoke systems:
 - 3.11.1. CMS
 - 3.11.2. database
 - 3.11.3. analytics
 - 3.11.4. e-commerce
- 3.12. Open source software costs
 - 3.12.1. configuration
 - 3.12.2. services
 - 3.12.3. support
- 3.13. Integrating into government gateway
- 3.14. Accreditation to connect to GSI
- 3.15. Firewalls
- 3.16. Back ups
- 3.17. Single source publishing
- 3.18. Security
- 3.19. Security certificates for encrypting sensitive data
- 3.20. Security audit at launch
- 3.21. Technical support
- 3.22. Other costs

4. Content provision

- 4.1. Style guides
- 4.2. Copy
- 4.3. Images
 - 4.3.1. creating images
 - 4.3.2. licensing images
 - 4.3.3. photoshoots
- 4.4. Audio content
 - 4.4.1. creating content
 - 4.4.2. licensing content
- 4.5. Video content
 - 4.5.1. creating content
 - 4.5.2. licensing content
- 4.6. Content for the website components listed in [Design and build](#)
- 4.7. Legal requirements e.g. terms and conditions
- 4.8. Translation
- 4.9. Accessibility, which may include:

- 4.9.1. transcripts of audio content
- 4.9.2. audio description
- 4.9.3. captioning
- 4.10. Updating content
 - 4.10.1. updates by external supplier
 - 4.10.2. updates by internal staff
- 4.11. Licensing embedded content e.g. Multimap
- 4.12. Metadata
- 4.13. Preparing PDFs for use online
 - 4.13.1. accessibility
 - 4.13.2. metadata
 - 4.13.3. summary description
- 4.14. Content migration e.g. from previous site(s)
- 4.15. Content maintenance
- 4.16. Moderating content
- 4.17. Reviewing existing content
- 4.18. Syndicating content
- 4.19. Other costs

NB All content provision may incur cost for the following stages of development:

- Research
- Commissioning
- Editing
- Proofreading

5. Testing and evaluation

- 5.1. Technical testing, which may include:
 - 5.1.1. system architecture testing
 - 5.1.2. security testing e.g. pen tests
 - 5.1.3. browser compatibility testing
 - 5.1.4. QA
 - 5.1.5. load testing
 - 5.1.6. code validation
- 5.2. Usability testing, which may include:
 - 5.2.1. user testing
 - 5.2.2. expert review
- 5.3. Accessibility testing, which may include:
 - 5.3.1. user testing
 - 5.3.2. expert review
 - 5.3.3. conformance inspection
 - 5.3.4. assistive technology testing
- 5.4. User acceptance testing
- 5.5. Automated testing
- 5.6. Testing standards compliance
- 5.7. Web analytics, which may include:
 - 5.7.1. Licensing third party webstats packages

- 5.7.2. Implementing tags
- 5.7.3. Ongoing reports and evaluations
- 5.8. Research into site usability and user satisfaction, which may include satisfaction surveys and other research methods listed in [Strategy and planning](#).
- 5.9. Measuring costs
- 5.10. Evaluation
- 5.11. Other costs