The Auditor-General Audit Report No.30 2003–04 Performance Audit

Quality Internet Services for Government Clients—Monitoring and Evaluation by Government Agencies

Australian National Audit Office

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2



Canberra ACT 20 February 2004

Dear Mr President Dear Mr Speaker

The Australian National Audit Office has undertaken a performance audit across agencies in accordance with the authority contained in the *Auditor-General Act 1997*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit and the accompanying brochure to the Parliament. The report is titled *Quality Internet Services for Government Clients—Monitoring by Government Agencies.*

Following its tabling in Parliament, the report will be placed on the Australian National Audit Office's Homepage—http://www.anao.gov.au.

Yours sincerely

Oliver Winder Acting Auditor-General

The Honourable the President of the Senate The Honourable the Speaker of the House of Representatives Parliament House Canberra ACT

AUDITING FOR AUSTRALIA

The Auditor-General is head of the Australian National Audit Office. The ANAO assists the Auditor-General to carry out his duties under the *Auditor-General Act 1997* to undertake performance audits and financial statement audits of Commonwealth public sector bodies and to provide independent reports and advice for the Parliament, the Government and the community. The aim is to improve Commonwealth public sector administration and accountability.

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4

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Contents

Abbreviations	7	
Glossary	8	
Summary and Recommendations	11	
Summary Background The audit approach	<mark>13</mark> 13 14	
Key Findings Administrative policies and responsibilities (Chapter 2) Agency websites and portals (Chapter 3) Internet-delivered services (Chapter 4) Overall audit opinion Agency Responses Summary	17 17 18 19 21 21	
Recommendations	23	
Audit Findings and Conclusions	27	
1. Introduction	28	
Government policy and the development of Government Internet services Relevant studies Audit approach Structure of this report		
2. Administrative Policies and Responsibilities Introduction Agency organisational arrangements for managing Internet delivery Agency policies and practices for monitoring Internet services Agency policies and practices for evaluation of Internet services Summary	45 45 46 47 48 49	
3. Agency Websites and Portals Introduction Performance information collected and monitored for agency		
websites and portals Reporting performance information about the agency website and portal User research for agency websites and portals Evaluations and reviews of agency websites and portals Summary	53 56 56 58 60	
4. Internet-delivered Services Introduction Performance information collected and monitored Reporting performance information	<mark>64</mark> 64 64 67	

User research for Internet-delivered services	69
Evaluation of Internet-delivered services	71
Taking action on monitoring information and evaluation	71
Summary	73
Appendices	
Index	82
Series Titles	83
Better Practice Guides	86

Abbreviations

ACIR	Australian Childhood Immunisation Register
ANAO	Australian National Audit Office
ASIC	Australian Securities and Investments Commission
ATO	Australian Taxation Office
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAM	Demand Assessment Methodology
DEWR	Department of Employment and Workplace Relations
EXAD	External Administration
FIDO	Financial and Investments Data Online
HIC	Health Insurance Commission
ICT	Information and Communications Technology
IT	Information Technology
NICP	National Indigenous Cadetship Project
NOIE	National Office for the Information Economy
PBS	Pharmaceutical Benefits Scheme
SMS	Short Message Service
URL	Uniform Resource Locator
VAM	Value Assessment Methodology
VMM	Value Measuring Methodology

Glossary

Terminology

In this report 'Internet services' refers to the general activity of providing any service through the medium of the Internet, including websites and portals. For purposes of clarity, a distinction is made in this report between the agency websites and portals and Internet-delivered services in each agency. For example, in one audited agency, the Department of Employment and Workplace Relations, <www.workplace.gov.au> is referred to as the agency portal, and JobSearch and the National Indigenous Cadetship Project as Internet-delivered services.

Agency website	An information and communication facility, designed and managed by a government agency which uses the medium of the Internet and the World Wide Web. The website provides access to information for a variety of client groups, as well as service transactions and the opportunity to contribute information and comment. Agency websites may provide access to additional websites within the agency and link to websites beyond the agency.
Accessibility	The extent to which the design, layout and display on web pages takes account of people with a range of disabilities.
e-commerce	Information, communication and business transactions conducted using electronic and Internet technology.
e-government	The conduct of government business featuring communication, information sharing and provision of transactions and services between government agencies and their clients, using electronic and Internet technology.
e-Envoy	A UK Government appointment. The Office of the e-Envoy aims to improve the delivery of public services and achieve long-term cost savings by joining up online government services around the needs of customers. The e-Envoy is responsible for ensuring that all government services are available electronically by 2005, with key services achieving high levels of use.
Evaluation	Evaluation is concerned with asking questions about performance information (effectiveness, efficiency and appropriateness), so as to provide answers that assist those responsible to better manage and improve service delivery.

Hits	The number of times an item, like a page or a graphic, is selected from a Web server. For example, when a user selects a Web page which contains five graphics, this is measured as six hits (five for the graphics plus one for the page). Hits are not a good measure of use because they do not compare like with like. They reflect the content of a page, not just the numbers of times users have selected it.
Internet delivered service	An agency service or program, normally provided through the Internet, more specifically the World Wide Web.
Internet service	A general or generic term referring to any form of Internet service. In this report it is also the term used when referring to both agency websites and agency Internet- delivered services.
Monitoring	Monitoring refers to the systematic collection of information to provide indications of how a program or service is performing.
Navigation	The format and features of a website that are designed to show users where they are located in the site and provide direction to further information and transactions available.
Portal	A means to facilitate access by specific communities of interest to information on the Internet and services from across multiple agencies using the platform of the World Wide Web.
Service	A discreet set of agency functions with defined purposes that are provided to particular client groups.
Watches	A means of monitoring the use of particular content on a website, tracking web usage statistics over a specified period.

Summary and Recommendations

Summary

Background

1. Government Internet services have a relatively short history. With few exceptions, such services did not exist 10 years ago. In December 1997, in recognition of its potential to improve government services, the Federal Government committed the Commonwealth to deliver all appropriate services using the Internet by the end of 2001.

2. In 2000, the Federal Government reaffirmed the importance it placed on agencies using the Internet to improve services to the clients of government programs. *Government Online—The Commonwealth's Strategy*¹ made clear that provision of government online services was to include not only provision of information about agencies and their programs, but also the conduct of transactions between government agencies and members of the public or businesses. Internet services were to complement—not replace—existing written, telephone, fax and counter services, as well as improve the quality, availability, responsiveness and consistency of those services.

3. In support of this initiative, the ANAO produced a Better Practice Guide, *Internet Delivery Decisions—A Government Program Manager's Guide*, to assist program managers to use the Internet effectively. The Better Practice Guide also provides a useful framework and context for the other Internet-related audits planned by the ANAO, including an audit scheduled for 2004 on the efficiency and effectiveness of Internet-delivered services.

4. At the time of this audit, it was acknowledged, internationally, that there was limited performance information being collected about Internet services. Consequently, few clear indications were available of the benefits to actual users. However, it was also generally recognised that, without some form of systematic performance measurement, the benefits from Internet services, and the return on significant related investments, cannot be assessed. Therefore, the ANAO considered it was timely and important to identify whether Commonwealth agencies were adequately monitoring and evaluating the effectiveness of their Internet services and the latter's contribution to agency outputs and outcomes.

¹ Department of Communications, Information Technology and the Arts, *Government Online—The Commonwealth's Strategy*, April 2000.

The audit approach

5. This audit examined the adequacy of selected agencies' approaches to monitoring and evaluation of Internet-delivered government programs and services. We also identified better practices and opportunities for improvement. Monitoring refers to the systematic collection of information to provide indications of how a program or service is performing. Evaluation is concerned with asking questions of that performance information (for example, about effectiveness, efficiency and appropriateness), so as to provide answers that assist those responsible to better manage and improve service delivery and to promote accountability for performance.

- **6.** The audit included the following five agencies:
- the Australian Securities and Investments Commission (ASIC);
- the Australian Taxation Office (ATO);
- the Commonwealth Scientific and Industrial Research Organisation (CSIRO);
- the Department of Employment and Workplace Relations (DEWR); and
- the Health Insurance Commission (HIC).

7. Given that agency's special interest in the topic, a copy of the proposed report was provided to the National Office for the Information Economy (NOIE) for comment.

8. In each agency covered, the audit team looked most closely at two levels of Internet use:

- agency website level—this refers to websites controlled by agencies. Websites were generally used to deliver information about the agency and, on some occasions, to deliver selected agency services. This part of the audit also included portals, which allow users to access collections of related government websites and services via a single online entry point. An example of a portal is Australian WorkPlace, headed by DEWR. Australian WorkPlace provides information about employment and workplace relations, government assistance, jobs, careers, training and wages; and
- Internet-delivered service level—this level refers to the services delivered on the Internet by divisions or programs within each agency. These services may have their own website or be delivered through the agency website.

9. In the broad, the services the ANAO examined were delivered in two main ways over the Internet:

- where any Internet user can browse and interact with the agency's data or databases. Examples of services delivered in this way included:
 - □ ASIC's *FIDO News*—a monthly newsletter that provides tips and warnings to consumers, and information about investing in shares and managed investments; and
 - CSIRO Enquiries—a national science and enquiry service for both internal and external users. This service has been operating for over 60 years using a range of methods which now includes an Internet option; and
- where clients can interact with agency databases and exchange sensitive information. Examples of this form of delivery included:
 - □ the ATO's *e-tax*—a software package which can be downloaded and enables the taxpayer to lodge a return over the Internet. The ATO aimed to have 800 000 lodgements via e-tax for the 2002–2003 tax year;
 - CSIRO's Sentinel Hotspots—an Internet based satellite mapping tool which provides timely fire location data to emergency service managers across Australia. 'Sentinel' was used extensively during the recent ACT, NSW and Victoria bushfire crises;
 - □ DEWR's Australian JobSearch, which enables Job Network members, jobseekers, employers and other agencies to meet their recruitment and employment needs;
 - DEWR's National Indigenous Cadetship Project. This service aims to improve professional employment prospects of Indigenous Australians. It has been available on the Internet for just over two years;
 - □ EXAD—an ASIC service that allows liquidators, receivers and administrators to lodge documents electronically for companies under external administration. Target users are some 800 liquidators in Australia;
 - Pharmaceutical Benefits Scheme Online (PBS Online)—an HIC initiative, which is still in the early stages of development and is designed to improve the efficiency of claims processing for pharmacies; and
 - the Australian Childhood Immunisation Register (ACIR)—HIC's national database containing information on the immunisation status of Australian children under the age of seven.

10. This report does not comment specifically on the performance of individual agencies. Rather, it presents the general findings across the agencies examined. As a result, readers should not assume a general finding necessarily applies to a particular agency examined. The report does, however, include examples of better practice found in the particular agencies examined, for the benefit of other public sector organisations.

Key Findings

Administrative policies and responsibilities (Chapter 2)

None of the agencies had agency-level administrative policies or guidance specifically addressing requirements and responsibilities for both monitoring and evaluation of agency websites and Internet-delivered services.

11. All agencies examined were yet to develop agency-level policies addressing requirements and responsibilities for monitoring of their Internet services and no agencies had policies for evaluation. The absence of agency policies or requirements for periodic evaluation means there was no clear obligation to assess the overall effectiveness of Internet services or the actual benefits to clients, even after extensive reorganisation of responsibility for website management had been put in place. However, in some instances, business planning processes at the program level provided a structured means to partially meet the monitoring gap by specifying monitoring and reporting requirements for certain defined Internet-delivered services.

12. Overall, while there were various approaches to address the issue of measuring the impact of Internet delivery by agencies, there were no examples of administrative policy or guidance that achieved all of the following:

- applicable at agency level;
- provided a consistent approach to monitoring and evaluation of websites, portals and Internet-delivered services; and
- allowed for judgements to be made about agency (as opposed to program) performance.

13. The ANAO considers that a strategic agency-level focus on Internet services is necessary because of the current evolving nature of the Internet, the likely cost of investment, and the impact it may have on future delivery strategies for government services. Such a focus should be supported through the establishment and communication of clear policies for monitoring, reporting and evaluation of Internet services that include definition of roles and responsibilities, specification of a range of monitoring information, and scheduling of periodic evaluations. This, in turn, would facilitate the establishment of consistent practices across the organisation and the collection of data that is useful in measuring and/or assessing agency performance. Given that its relatively recent introduction means there is limited experience about the best methods of providing services online, evaluation is essential as a basis for rigorous assessment of the most effective ways to provide quality Internet services in the future.

Most agencies were in the process of changing the governance and management arrangements for their agency websites.

14. Most agencies had identified areas for improvements in their websites, and were in the process of changing governance and management arrangements for their websites to ensure consistency of standards, design and presentation of content. Most agencies recognised this as providing a good opportunity to develop appropriate policies and to specify responsibilities for monitoring and evaluating their Internet services.

Agency websites and portals (Chapter 3)

Performance information collected on agency websites and portals was limited because of a lack of clear objectives and agreed performance indicators.

15. Agency websites and portals examined were not established with clear objectives and associated performance indicators. Agencies had relied largely on readily available web statistics as the main source of performance information and had generally not established clear objectives or performance indicators. While they provided summary views of site activity, web statistics did not, by themselves, necessarily suggest areas for improvement. Managers were able to interpret the information when the web statistics (consisting of trend analysis over time) were combined with user research that accounted for the observed patterns. Agencies were not yet using options within web statistics packages, for example, data on pathways of users around the website, which would provide a richer, more layered, understanding of site use.

There was limited user research in development of agency websites and portals.

16. None of the agencies had conducted detailed user research to inform the development and content of their websites or portals. However, the ANAO found that, following the establishment of agency websites, the majority of agencies audited had commissioned some detailed user research to inform redevelopment of their websites.

17. All agencies provided means for users to comment on the website, but monitoring of these comments was occurring mainly at the agency web manager level. This information was used chiefly for alerting agencies to problems such as links to other sites that no longer worked or to inaccurate content, rather than for gathering information about users and their experience of the website or portal.

Agencies were unable to demonstrate the contribution of websites and portals to their outcomes and outputs.

18. The ANAO found that no agency had evaluated the overall effectiveness of its websites and portals and their contribution to agency outputs and outcomes. The absence of strategic policy, combined with the

absence of overall performance evaluation, means that agency investment in website development and redevelopment is not informed by evidence as to how effective these sites are in engaging with, and providing services to, the public in general and clients in particular.

19. In the main, the information reported to decision-makers responsible for the agency website and portals was limited to broad usage data and was not linked to objectives. Therefore, the contribution of agency websites and portals to agency outcomes and outputs was not demonstrated.

20. The ANAO considered that agency websites and portals should be subject to the same rigorous review as any other programs or activities that are considered key to the accomplishment of agency strategy and objectives.

Agencies have used the results of reviews to improve, restructure and redevelop their websites and portals.

21. The ANAO found that senior executives were responding to the results of website reviews. There were instances where reviews of agency websites provided the basis for complete redevelopment of those sites.

22. Notwithstanding this, there was little evidence that agencies were systematically considering performance information, with the exception of user visits, at executive management level. This may partly be due to the fact that most agencies were in the process of determining agency web strategy, organisational arrangements and subsequent information, monitoring and reporting requirements.

Internet-delivered services (Chapter 4)

Most agencies had objectives for their Internet-delivered services and were monitoring a core set of information that showed achievement against those particular objectives.

23. The ANAO found that a core set of information for monitoring performance and use had been developed for most of the audited Internetdelivered services. In contrast to the limited information used for monitoring agency websites, the information collected and monitored for most services was adequate as it was aligned with pre-defined service objectives and encompassed a variety of sources and collection techniques. The ANAO considered that this contributed to appropriate and effective agency action to address the implications of data collected and enhance service delivery.

24. Managers of Internet services utilised existing agency business planning processes to report on their performance. The ANAO found that the service contribution to agency outcomes and outputs was best demonstrated when explicit reference was made in planning documents to the relationship between the service and higher-level agency policy and program objectives. Furthermore, reporting against service objectives informed decision-makers

and other stakeholders of the broader role of the service and facilitated accountability and management review of its relevance and usefulness.

Most agencies had not conducted user research prior to establishing their Internetdelivered services, but they had commissioned several forms of user research once services were operating.

25. While most agencies had not conducted user research prior to establishing their services, they had commissioned several forms of user research once services were operating. Agencies applied the results of user research to improve service delivery. Research included customer satisfaction surveys and market research of specific user groups.

Agencies were reviewing aspects of service provision and acting on these reviews to improve service delivery.

26. In contrast with the situation for agency websites, taking action on performance information, particularly at program manager level, was evident for all services, reflecting the more extensive performance information and the greater alignment of performance information with service objectives.

27. From their reviews of performance information about the services, agencies addressed the following three issues:

- technical and systems capacity issues highlighted by web statistics and system performance monitoring;
- content or information issues, raised through user comments and monitoring of use patterns; and
- business process issues raised through monitoring client usage and process efficiency for those services where clients conduct business transactions through the service.

28. In the case of services which had been operating for sufficient time to warrant special studies or reviews, the recommendations from agency studies had either been implemented or were in the process of being implemented.

No agency in the audit had planned or conducted an overall evaluation of the effectiveness of Internet-delivered services.

29. As previously mentioned, most agencies had reviewed aspects of service provision. The results were used to improve these aspects of the service. However, no agency in the audit had planned or conducted an overall evaluation of the effectiveness of Internet-delivered services. As already discussed in relation to agency websites, the lack of agency policy on evaluation, combined with the absence of evaluation activity, means that the investment in Internet-delivered services is occurring with limited quantitative or qualitative evidence of the effectiveness of these services in meeting their objectives.

30. While this situation was understandable in the early days of Internet delivery, the ANAO considers that now that the Internet is becoming a standard means of communication and, in many cases, service delivery for all government agencies, Internet delivery should be subject to the same rigorous review and evaluation as services delivered in any other manner.

Overall audit opinion

31. The audit concluded that audited agencies did not have specific agency level policies, including clear responsibilities for both the monitoring and evaluation of websites, portals and Internet-delivered services.

32. In relation to websites and portals, in most instances clear objectives had not been articulated, and little user research had been conducted. Agencies recognised this weakness. As a result, most agencies audited are putting in place measures to ensure a more holistic and strategic view of Internet services, and online communication with their clients.

33. However, the audit found that the situation is more positive at the individual Internet-delivered service or program level within agencies, where information is routinely being collected, analysed and applied to improve service delivery. Nevertheless, there is considerable scope for improvement in the quality of that information. The audit has identified some possible areas for action in its recommendations.

34. Overall, in the ANAO's opinion, the audit concluded that current approaches to the monitoring and evaluation of Internet services by agencies were not adequate. However, in view of the short period that Internet services have been a key feature of service delivery, this situation is not totally unexpected. Also, there was evidence that agencies are now making considerable efforts to improve their monitoring and evaluation of this potentially key strategic tool.

Agency Responses Summary

35. ASIC, ATO, CSIRO, HIC and NOIE agreed with all recommendations. DEWR agreed with three recommendations and noted two. Full responses from ASIC, CSIRO, HIC and NOIE can be found in Appendix 1.

36. NOIE commented that it believes that the proposed report will be valuable in focusing agencies attention on the need for a strategic approach to service delivery and, in particular, the Internet and emerging electronic service delivery channels.

37. NOIE noted that most agencies were in the process of ensuring consistency across their websites and portals. It suggested a new recommendation:

That agencies develop governance and management arrangements for their websites and portals to ensure consistency of standards, design and presentation of content across the agency.

38. The consistency of design and presentation of content is not addressed in this report. Nevertheless, the ANAO considers this to be a useful recommendation.

Recommendations

Recommendation No.1 Para 2.26	The ANAO recommends that agencies develop and implement appropriate policies for monitoring and evaluation of Internet services; define related roles and responsibilities; specify a range of monitoring information; provide for scheduling of periodic evaluation; and clarify reporting and accountability arrangements.		
	ASIC Response: Agreed.		
	ATO Response: Agreed.		
	CSIRO Response: Agreed.		
	DEWR Response: Agreed in principle.		
	HIC Response: Agreed.		
	NOIE Response: Agreed.		
	The ANAO recommends that agencies clearly define objectives for their websites and portals; include the objectives in relevant planning documents; and conduct periodic evaluations in relation to these objectives.		
Recommendation No.2 Para 3.36	define objectives for their websites and portals; include the objectives in relevant planning documents; and conduct periodic evaluations in		
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No.2	 define objectives for their websites and portals; include the objectives in relevant planning documents; and conduct periodic evaluations in relation to these objectives. ASIC Response: Agreed. ATO Response: Agreed. 		
No.2	define objectives for their websites and portals; include the objectives in relevant planning documents; and conduct periodic evaluations in relation to these objectives. <i>ASIC Response</i> : Agreed. <i>ATO Response</i> : Agreed. <i>CSIRO Response</i> : Agreed.		
No.2	define objectives for their websites and portals; include the objectives in relevant planning documents; and conduct periodic evaluations in relation to these objectives. <i>ASIC Response</i> : Agreed. <i>ATO Response</i> : Agreed. <i>CSIRO Response</i> : Agreed. <i>DEWR Response</i> : Agreed.		

Recommendation No.3 Para 3.46	use web statist monitoring perfor agency site and delivery. These st	mends that agencies prepare and tics that will contribute to rmance against objectives of the be used to improve service atistics should include measures differences between users, to nary statistics.
	ASIC Response:	Agreed.
	ATO Response:	Agreed.
	CSIRO Response:	Agreed.
	DEWR Response:	Noted the Recommendation.
	HIC Response:	Agreed.
	NOIE Response:	Agreed.
Recommendation No.4		nmends that in order to ensure elevant and responsive to user
Para 3.54	agency site l	earch to reveal access to the by different users, the needs of the benefits users gain from ices; and
	1 1	le with disabilities in the testing bsites for accessibility.
	ASIC Response:	Agreed.
	ATO Response:	Agreed.
	CSIRO Response:	Agreed.
	DEWR Response:	Noted the Recommendation.
	HIC Response:	Agreed.
	NOIE Response:	Agreed.

Recommendation

No.5

Para 4.37

In future development of Internet-delivered services, the ANAO recommends that agencies, commensurate with the scale of the proposed service:

- develop business cases and clear objectives for services, tied to their corporate priorities and strategies, before they commence defining objectives in relation to the intended clients for services;
- specify the information required to monitor and assess performance of services, and to demonstrate their contributions to agency outcomes and outputs;
- ensure that their reporting framework provides an analysis of relevant information on internet delivered services to senior management; and
- plan and conduct periodic evaluations of the overall effectiveness of services, considering agency objectives as well as benefits and costs for major client groups.

ASIC Response:Agreed.ATO Response:Agreed.CSIRO Response:Agreed.DEWR Response:Agreed.HIC Response:Agreed.

Audit Findings and Conclusions

1. Introduction

Government policy and the development of Government Internet services

1.1 Government Internet services have a relatively short history. With few exceptions, such services did not exist 10 years ago. The 1994 report of the Broadband Services Expert Group², whose focus was on the opportunities for Australia created by new network technologies, recommended that the Commonwealth Government act as a leading user of broadband technologies, in order to provide experiences for and to stimulate usage by the Australian public. However, the widespread diffusion of government Internet services could not be imagined at that time. A major 1995 review of Information Technology (IT) in the Commonwealth, *Clients First*, mentioned Internet services very briefly.

1.2 In December 1997, the Prime Minister committed the Commonwealth to deliver all appropriate services online by the end of 2001. Government Online—The Commonwealth's Strategy³ made clear that government online services were to provide information about agencies and their programs, and to permit transactions between government agencies and members of the public or businesses. Internet services were to complement-not replaceexisting written, telephone, fax and counter services, as well as to improve the quality, availability, responsiveness and consistency of those services. Under Government Online, all agencies were required to prepare an Online Action Plan by September 2000. This requirement was to ensure that all agencies systematically audited their information and services to determine what should be delivered online and set a timetable for delivery. By December 2000, over 90 per cent of Commonwealth Government departments had established an Internet presence.⁴ The Government's initiatives resulted in the recognition in 2002[°] that Australia was one of the four leading nations in the western world in its use of e-business to provide government services.

1.3 In November 2002, a new framework for e-government, *Better Services*, *Better Government*⁶ was launched, which outlined the broad directions and

- ⁵ Booz Allen Hamilton, *The World's Most Effective Policies for the e-Economy*, London, November 2002. Available at or <www.e-envoy.gov.uk>.
- ⁶ National Office for the Information Economy, *Better Services, Better Government/The Federal Government's e-government Strategy*, November 2002.

² Broadband Services Expert Group (1994) *Networking Australia's Future: the Final report of the Broadband Services Expert Group.* Canberra, AGPS.

³ Department of Communications, Information Technology and the Arts, *Government Online—The Commonwealth's Strategy*, April 2000.

⁴ National Office for the Information Economy, *Commonwealth Government Online—Progress Report*, December 2000.

priorities for the future of e-government in Australia. It sought to maintain the momentum of the achievements under Government Online through six main objectives. These were to:

- achieve greater efficiency and returns on investments;
- ensure convenient access to government services and information;
- deliver services responsive to client needs;
- integrate related services;
- build user trust and confidence; and
- enhance closer public engagement.

1.4 These objectives signalled an emphasis on the benefits of government Internet services for the public and users rather than earlier concerns with the provision of the technologies and services. These objectives also flagged a more strategic approach to the business cases for developing services. With this shift came a greater responsibility for agencies and for program managers to clarify the purposes of programs and to think more strategically about the use of Internet services as part of program delivery.

1.5 In this regard, *Better Services, Better Government* stated that it was important for agencies to:

- establish business cases for investments in changes to their operational and business processes enabled by the online environment; and
- assess how they are progressing in terms of meeting the broad e-government agenda. This would require regular review mechanisms for assessing progress on key performance indicators.

1.6 NOIE advised the ANAO that it is supporting this policy with initiatives to foster greater skills within the Commonwealth Public Service in areas such as monitoring and evaluation, user research, and business strategies for Internet services. In August 2003, NOIE was in the process of developing frameworks and guidelines to assist agencies with website monitoring and evaluation. Some examples of relevant NOIE work in this area included:

• a series of guidelines to assist in forming portals.⁷ Recommended features include collecting of information on customer comments and

⁷ An example of a portal is <www.workplace.gov.au>, which is a Federal Government Internet site for all work and employment related material and links.

monitoring of usage patterns to measure success and assist in the continual improvement of services⁸;

- the Demand Assessment Methodology (DAM) and Value Assessment Methodology (VAM)⁹ which were developed to assist government agencies to assess their online programs. NOIE tested these methodologies in one agency and at the time of report writing was developing training materials to promote the DAM and VAM to Commonwealth agencies; and
- revision and expansion of better practice checklists as part of an E-Government Better Practice Program. The checklists will include evaluation and usage analyses of websites.

Relevant studies

International studies

1.7 In 1999, the UK Government appointed an e-Envoy and the Office of the e-Envoy to improve the delivery of public services and achieve long term cost savings by forming online government services around the needs of customers. The e-Envoy is also responsible for ensuring that all government services are available electronically by 2005 with key services achieving high levels of use. Major reports commissioned in 2002 by the Auditor-General and the e-Envoy in the United Kingdom emphasised the central importance of performance information as well as public use of online services, in any judgment of their value. The report, *Better Public Services through e-government*¹⁰ observed that more reliable assessments of costs and benefits were required at the departmental level: 'Generally, departments lack baseline data against which to monitor and measure improvements and efficiency made possible by IT'.

1.8 A second report measured the e-commerce progress of the G7¹¹ countries plus Australia and Sweden.¹² Overall leaders were judged to be Sweden, the United States of America (US), Canada and Australia, with Australia considered to be especially strong in its supportive legislation for

⁸ In August 2003, NOIE commissioned an evaluation of the portals framework as well as a pilot project to develop a process to determine what content customers need and how they prefer the content to be presented.

⁹ NOIE, *E-government Benefits Study*, April 2003 and *E-government Benefits Study—Agency Case Studies*, NOIE, May 2003.

¹⁰ Report by the Comptroller and Auditor-General, 4 April 2002, p.3. Available at http://www.nao.gov.uk/publications/nao_reports/01-02/0102704-les.pdf.

¹¹ G7 industrial economies (U.S., Canada, Japan, France, Germany, Italy and the United Kingdom).

¹² Booz Allen Hamilton, *The World's Most Effective Policies for the e-Economy*. London, November 2002, available at <www.bozallen.com, www.e-envoy.gov.uk>.

government e-commerce. The report characterises successful approaches as involving 'strong government leadership and a dual focus on back-office integration and front-office service delivery'.¹³ Although quality service delivery was emphasised as a feature of advanced practices, a closer reading of the report reveals the paucity of information in this area. For example, though Sweden and Australia were world leaders in uses of online technology by government itself, the impact on costs and efficiency was listed as 'not known'.¹⁴ The lack of performance data about improvements in the standard and availability of public services as a result of introducing Internet services was noted across all governments. Actual examples of efficiency savings were rare.¹⁵

A more extensive report¹⁶ made two recommendations for policy to 1.9 focus on information about uses of online services. The first was that agencies be required to 'grow the usage of their websites and the take-up of their electronic services over time', and the second that an information regime be put in place to 'identify the value-added achieved'. The information 'should focus on actual usage and take-up of electronic services' across government and at an agency level. Since release of this report, in an effort to increase the number of people using key e-government services, the UK's Minister for Cabinet Office launched the Quality Framework for UK Government Website Design¹⁷ in July 2003. The purpose of this framework was to encourage government to design websites around the user, and it set out guidance for government web managers to incorporate user needs in the web design process. The results of research from a user perspective can be seen in the development of new online services that directly address particular client groups such as young people, (for example, <http://younggov.uk online.gov.uk/>), and encourage involvement in government forums and decision-making (for example, <http://www.Ukonline.gov.uk/CitSpace/ Consultations/>).

1.10 Mechling and Booz Allen in the US developed the Value Measuring Methodology (VMM)¹⁸ which evaluated Internet-delivered projects across six essential factors. These included cost/benefit analyses and a project's political and social value. The VMM aimed to provide program managers in government agencies with both empirical and qualitative data for assessing

¹³ 'Australia gets high marks in study of e-economies' *Canberra Times*, 25 November 2002.

¹⁴ The World's Most Effective Policies for the e-Economy, op cit. p.135.

¹⁵ The World's Most Effective Policies for the e-Economy, op cit. p.156–159.

¹⁶ Dunleavy, P. et al, *Government on the Web II*, 25 April 2002, p.4. Available at http://www.governmentontheweb.org/downloads/report_2000/971lvf_Governement_on_the_web_11pdf>.

¹⁷ Document available at <http://www.e-envoy.gov.uk/Resources/WebGuidelines/fs/en>.

¹⁸ 'Measuring e-gov', Federal Computer Week, April 8 2002. Document available at http://www.fcs.com/fcw/articles/2002/0408/mgt-egov-04-08-02.asp.

the potential benefits of moving a service from its current method of delivery, such as paper-based or telephone, to electronic Internet-based delivery.¹⁹

1.11 These international studies give a strong lead for focusing on the performance of government Internet services for clients and the public. However, there are no known studies which consider monitoring and evaluation of the performance of Internet services across a number of government agencies.

ANAO reports

1.12 The ANAO has conducted a number of performance audits of agencies' use of the Internet to deliver Government programs and services. The first of these was *Internet Security Management*.²⁰ The report made recommendations for careful planning in the introduction of Internet technologies, including adequate documentation of policies, plans and procedures necessary for secure site management and timely use of available security tools.

1.13 The ANAO was early in emphasising knowledge of the quality and performance of Internet services in relation to the public and clients. In 1999, the ANAO conducted a cross-portfolio review of how government agencies were implementing Commonwealth policy on Internet use. The Audit Report No.18, *Electronic Service Delivery, Including Internet Use, by Federal Government Agencies*²¹ affirmed the importance of promoting good practice in service delivery. It identified monitoring and evaluating service delivery via the Internet, to allow for continuous improvement, as one element of good practice.

1.14 A Better Practice Guide Internet Delivery Decisions: A Government Program Manager's Guide²² was then developed and written for program managers, to advise them on how they could use the Internet effectively when delivering programs and services. The Better Practice Guide thereby anticipated the shift of emphasis in management of government Internet services from the IT function to program and business areas of agencies. One of the booklets within the Better Practice Guide, Monitoring and Evaluating Internet-delivered Programs and Services, provided a basis for the current audit. It described a systematic process for regular monitoring and periodic

¹⁹ It should be noted that the VMM had only been recently developed and at the time of writing had not been tested extensively on applications.

²⁰ ANAO, Internet Security Management (Audit Report No.15, 1997–98). Available at http://www.anao.gov.au.

²¹ ANAO, Electronic Service Delivery, Including Internet Use, By Federal Government Agencies (Audit Report No.18, 1999–2000) Available at http://www.anao.gov.au>.

²² ANAO, Internet Delivery Decisions: A Government Program Manager's Guide, 2001. Available at http://www.anao.gov.au.

evaluation, including the use of a combination of methods, so that the benefits of Internet services for clients could be known and the services improved.

1.15 In 2001, the ANAO tabled *Internet Security within Commonwealth Government Agencies.*²³ This audit found that security levels across the audited agencies varied significantly from very good to very poor. For the majority of agency websites in the audit, the current level of Internet security was insufficient, given the threat environment and vulnerabilities identified with a number of agency sites. Further, while some agencies had produced good threat and risk assessments and documentation generally, these were not always effectively administered. Overall, the audit considered that a number of agencies could improve performance in some key areas and all agencies could improve performance in one or more aspects of managing Internet security. The ANAO noted that most agencies had adopted a risk management approach to the management of Internet security and that, in most cases, this integrated well with agencies' top-level risk management activities.

1.16 This current audit is one in a program of audits of the Internet in government agencies. A further audit has been planned for 2004 on the efficiency and effectiveness of Internet-delivered services.

Audit approach

Audit objectives and criteria

1.17 The audit was conducted at a time when, internationally, there was acknowledgement of limited performance measurement of Internet services and their benefits to actual users. Without such systematic performance measurement, the benefits from government Internet services cannot be assessed. Of note is the view of the e-Envoy in the UK stating that useful measures would be at the department or agency level as well as at the whole of government level, and that they should include the views of the public.

1.18 Against this background, the ANAO defined the following objectives for the audit:

- to form an opinion on the adequacy of selected agencies' approaches to monitoring and evaluation of government programs and services delivered on the Internet; and
- to identify better practices and opportunities for improvement.

²³ ANAO, Internet Security within Commonwealth Government Agencies (Audit Report No.13 2001-02) Available at http://www.anao.gov.au.

- **1.19** The audit criteria addressed whether the agencies in the audit:
- had clear policies and defined responsibilities for monitoring and evaluation of Internet services;
- determined the contribution of Internet services to the achievement of agency outcomes and outputs; and
- used the data from monitoring and evaluation of Internet services to improve the management of online delivery, to demonstrate accountability and to enhance agency outcomes.

Agencies audited

- **1.20** The following five agencies were audited:
- the Australian Securities and Investments Commission (ASIC);
- the Australian Taxation Office (ATO);
- the Commonwealth Scientific and Industrial Research Organisation (CSIRO);
- the Department of Employment and Workplace Relations (DEWR); and
- the Health Insurance Commission (HIC).

1.21 Given that agency's special interest in the topic, a copy of the proposed report was provided to the National Office for the Information Economy for comment.

1.22 A brief description of each of the agencies and the Internet services audited is provided later in this Chapter.

Audit scope and focus

1.23 Commonwealth government agencies have each developed their own forms of management for Internet services. Because of this diversity, it was not possible to conduct the audit with a preconceived or standard model of good practice. Indeed, one of the anticipated benefits of the audit was to describe some of the main approaches that existed, and to highlight good practices. The audit objectives were adapted to, and applied in relation to, the management policies and practices for Internet services that existed within each agency.

1.24 Monitoring of technical IT and systems performance was not included in the audit (unless it measured usage); nor was monitoring of the content of websites. The cost of Internet services was not considered in this audit since it may be a focus of a later performance audit.

1.25 The focus of the audit was on the adequacy of the monitoring and evaluation practices of selected agencies' Internet services, not on the adequacy of the services themselves. Assurance in the means for monitoring and evaluation needs to be established before claims about success of services can be accepted with confidence. Where the audited service was part of a broader service²⁴ the audit focused on only the Internet-delivered aspects.

1.26 While useability testing was included in the scope of the audit, agencies only conducted it as part of the early testing of software systems and interfaces that were used to provide services. This was conducted with a small number of users. The research is not discussed further in the report because the information was limited and did not include findings from users about completed Internet services.

1.27 The preliminary study for the audit identified that, in response to the *Government Online Strategy*, agencies were integrating Internet services into program management processes. However, the agency websites were regarded differently and were generally not integrated with existing management and accountability arrangements. For this reason, the audit looked specifically at two levels:

- the agency website; and
- two Internet services in each of the agencies included in the audit (with the exception of the ATO where only one service was selected).

1.28 Internet services were defined as services delivered through a web browser platform and involving more than government as clients. They could include private (web-enabled) networks, and clients such as organisations or professional groups as well as the general public.

²⁴ For example, CSIRO Enquiries is delivered by telephone, mail, fax, email and Internet. The audit covered only the Internet-delivered part of CSIRO Enquiries.

Audit methodology

1.29 The audit involved:

- an examination of government policies, strategies, relevant research reports and studies;
- an examination of agency policies and practices relevant to Internet services;
- interviews with program or service managers and agency staff responsible for the agency website;
- reviews and analyses of plans, monitoring reports and evaluation reports from services selected for audit and from agency-wide functions relevant to the audited services; and
- a focus group of representatives from all of the agencies audited and from NOIE to assist in identifying patterns and problems in agencies' monitoring and evaluation of their Internet use.

1.30 The audit was conducted in accordance with ANAO Auditing Standards at a cost of \$421 600. The ANAO engaged a consultancy firm, Courage Partners Pty Ltd, to manage and conduct the audit.

The agencies audited and their Internet services

1.31 The services selected for audit were designed to maximise the diversity of agencies, websites and services so that a very broad picture of Commonwealth government practices in monitoring and evaluation of Internet services could be identified. With this approach, the audit findings are more likely to be relevant across many agencies rather than just for a few high profile sites.

1.32 Key features considered in the selection of services for audit included: size and expense, type of client group, purpose, stage of development and innovative use of the web medium. Consideration was also given to the four stages of Internet service delivery that were identified in a model developed by the ANAO as part of its 1999 *Electronic Service Delivery* audit:

- Stage 1 is a website that publishes information about the agency and its services;
- Stage 2 allows Internet users to browse and interact with the agency's database(s);
- Stage 3 includes the first two stages and permits users to enter information on the website, exchanging or transacting secure information with the agency; and

• Stage 4 is the same as Stage 3 but in addition, the agency, the user's prior approval, shares that user's information with other government agencies.

1.33 The ANAO focussed its sample selection on Stage 2 and Stage 3 Internet-delivered services. The role of each of the agencies and a brief description of the Internet services audited is provided below. The description will assist readers to understand the audit findings in later chapters.

Australian Securities and Investments Commission (ASIC)

1.34 ASIC is an independent Commonwealth statutory authority set up in 1991 to regulate financial markets, securities, futures and corporations. In 1998, ASIC became responsible for consumer protection in superannuation, insurance, deposit taking and, from 2002, credit. ASIC is in the Treasury portfolio and works with other financial and law enforcement agencies in Australia and internationally.

1.35 Under the *Australian Securities and Investments Commission Act* 2001, ASIC is required to:

- uphold the laws for which ASIC is responsible effectively, quickly and uniformly;
- promote confident and informed consumers and investors; and
- improve performance of the financial system and entities within it.

Table 1.1

ASIC website and audited services

Agency website	 <www.asic.gov.au> – provides services and information for businesses and the general public</www.asic.gov.au> ASIC was an early user of Internet technology and first launched its website in 1996. From 1998, the website allowed public searching of information databases. In 2000, ASIC undertook a major overhaul of its website directed to the needs and requirements of business and launched a new website for investors and consumers called Watchdog. This was later renamed FIDO (Financial Information Delivered Online), which is a subsite of asic.gov.au. The ASIC website provides two kinds of services. One allows stakeholders to lodge documents electronically and the other, examined in the audit, provides information brokers, the National Names Index, and various public registers. In 2002–03 there were 7.6 million free Internet searches of company names, numbers and document lists, making this the most popular service offered through the ASIC website. There were 3.2 million searches using an information broker and 98 per cent of full company searches occurred online. 71 per cent of company registrations were done electronically and 67 per cent (or 781 436) of annual returns were lodged electronically.
FIDO News	FIDO News is a monthly e-newsletter sent free of charge to subscribers.
(Stage 2)	FIDO News:
	warns consumers about recent scams;
	• tells consumers when ASIC has issued consumer alerts; and
	 provides the latest tips and information about investing in shares and managed investments, insurance, superannuation and depositing money.
	FIDO News is one of the strategies used by ASIC to increase the number of people coming back to the FIDO website. FIDO News items are linked to parts of the FIDO website to encourage subscribers to access existing website information. Launched in March 2001, FIDO News subscriptions have increased substantially since inception. At the time of audit fieldwork FIDO News had 8 334 subscribers.
EXAD (Stage 3)	The EXAD project was initiated in September 2000 to allow liquidators, receivers and administrators to lodge documents electronically with ASIC for companies under external administration. Target users for the EXAD service are some 800 registered liquidators in Australia, who work either individually or in firms or partnerships of various sizes.

Source: ANAO and agency documentation.

Australian Taxation Office (ATO)

1.36 The ATO is part of the Treasury portfolio. The ATO administers revenue systems and legislation for taxes, superannuation and excise. In

2001–02, total cash collections were \$165 426 million. The ATO also supports provision of services such as private health insurance and family assistance.

Table 1.2

ATO website and audited services

Agency website	<www.ato.gov.au> The website, ATOassist, provides general tax information to a broad cross-section of users, including individuals, businesses, non-profit organisations and tax and superannuation professionals.</www.ato.gov.au>
e-tax (Stage 3)	<i>e-tax</i> Operating since 1999, <i>e-tax</i> is a software package which users can download from the Internet (ato.gov.au). The software is used to prepare a tax return and enables the client to lodge the return with the ATO over the Internet. <i>e-tax</i> is part of ATO's personal tax service and provides an alternative to the traditional paper based <i>TaxPack. e-tax</i> users represent a broad spectrum of Australian society. <i>e-tax</i> consists of software, system infrastructure, web pages and a help desk facility (both internal and external). The ATO aimed to have 800 000 lodgements via <i>e-tax</i> for the 2002–03 tax year.

Source: ANAO and agency documentation.

Commonwealth Scientific and Industrial Research Organisation (CSIRO)

1.37 CSIRO is an independent statutory authority operating under the *Science and Industry Research Act* 1949. Reporting and accountability arrangements are set out in the *Commonwealth Authorities and Companies Act* 1997 (the CAC Act). CSIRO's primary functions are:

- to carry out scientific research;
- to assist Australian industry and to further the interests of the Australian community;
- to contribute to national and international objectives and responsibilities of the Commonwealth Government; and
- to encourage application and use of results of scientific research.

1.38 Other functions include international scientific liaison, training of researchers, publication of research results and disseminating information about science and technology.

Table 1.3

CSIRO website and audited services

Agency	<www.csiro.au></www.csiro.au>
website	CSIRO was among the earliest agencies to develop a web presence (1992). The current CSIRO website, called CSIROnline, was originally developed as a corporate site that carried specially written news items and media releases, as well as summary information about the work of CSIRO divisions and major research initiatives. During 2002, as part of new strategic directions, an overall framework for a 'unified web presence' was developed. Called 'eCSIRO', this framework aimed to use a combined Internet/intranet presence to communicate and share information across the organisation and to present consistent and high quality online services to external clients, especially the Australian public and business. A newly designed corporate web presence, CSIROLive, is currently under development. This website will provide a gateway to the other sites across CSIRO and use the medium more strategically to foster an understanding of CSIRO and to deliver information and services in an integrated way.
CSIRO Enquiries (Stage 2)	CSIRO Enquiries is a national science enquiry and referral service which has been operating for 60 years. It deals with both external and internal stakeholders, including government, general public, science, education, industry and business communities, and it provides enquirers with information about CSIRO research, activities and people as well as connecting industry enquirers with the right people within CSIRO. The service is delivered by phone, Internet, fax and mail, handling approximately 40 000 enquiries a year across these channels. CSIRO Enquiries has also developed pages on the website for students, individuals and organisations. For example, students can access and download online information about specific areas of CSIRO's research from the CSIRO Enquiries education web pages.
Sentinel Hotspots (Stage 3)	The Sentinel Hotspots website <www.sentinel.csiro.au> is an Internet- based satellite mapping tool designed to provide timely fire location data to emergency service managers across Australia. The mapping system allows users to identify fire locations that could pose a potential risk to communities and properties. Sentinel Hotspots can be used by the public as well as emergency service personnel. The system was launched on 15 January 2003 by the Minister for Science, and was extensively used by emergency services, the media and other interested parties during the Canberra, NSW and Victoria bushfire crises which began a few days later.</www.sentinel.csiro.au>

Source: ANAO and agency documentation.

Department of Employment and Workplace Relations (DEWR)

1.39 DEWR is a department of state which aims to support strong employment growth and the improved productive performance of enterprises in Australia.

Table 1.4

DEWR portal and audited services

Agency portal	<www.workplace.gov.au> The Australian WorkPlace Portal provides information to a diverse target market about DEWR programs and services in employment and</www.workplace.gov.au>
	workplace relations. The objective of the Australian WorkPlace Portal is to be the definitive, whole of government source of information on employment, workplace relations, jobs, careers, training, wages and government assistance in these areas.
	The target market for WorkPlace is diverse and includes:
	 job seekers who want access to all job opportunities;
	 employees who want to know about award conditions and government assistance;
	 students who want to know about occupations in demand and how they can obtain the necessary qualifications;
	• teachers and counsellors who wish to guide career choices;
	 unemployed persons who want to know about government assistance;
	recruitment agencies who want access to skilled workers;
	 employers who want to know their workplace obligations or their eligibility for government assistance;
	 employees who want to know their rights and industry award conditions; and
	government departments and agencies.
Australian JobSearch (Stage 3)	The purpose of JobSearch is to be an enabler for Job Network Members, job seekers, employers and other agencies to meet their recruitment and employment needs. JobSearch gives access to a national database of employment vacancies and resumes of job seekers. The service is available through Internet access to the website and through kiosks with touch screens in Centrelink and Job Network Members' offices.
	The JobSearch suite of services also provides information about apprenticeships and self employment. The site includes a directory of Job Network providers, careers information on over 400 occupations and the details of over 2 400 vocational and higher education courses. 'Harvest Trail' gives information to job seekers wanting to undertake seasonal work as they travel.
	JobSearch includes job matching and automatic notification of daily vacancy matches to job seekers. Job seekers are able to elect their notification preference from the following options:
	personal page via JobSearch login;
	telephone via Interactive Voice Response (IVR);
	email; and
	SMS (for eligible job seekers only).

National Indigenous Cadetship Project (NICP) (Stage 3)	The National Indigenous Cadetship Project (NICP) is a Commonwealth Government initiative aimed at improving professional employment prospects of Indigenous Australians. Under the NICP, undergraduate Aboriginal and Torres Strait Islander university students (cadets) are matched with employers who give them work skills and professional employment. The expectation is that after cadets have successfully completed their studies they will continue working for their employer.
	NICP has been operating for the past ten years and incorporated Internet services over two years ago.
	Employers who wish to participate in the NICP are required to register through the website at <www.nicp.dewr.gov.au>. Students who wish to participate in the program must also register and this is usually lodged through the website. If Internet access is unavailable, forms can be completed by hand and DEWR staff input the data.</www.nicp.dewr.gov.au>
	Employers, once approved, are given online access to view student details and applications kept on the NICP database. They can notify the NICP Coordinator through the website or by email, with details of the applicants they wish to interview for cadetships.

Health Insurance Commission (HIC)

1.40 The HIC is a statutory authority, created under the *Health Insurance Commission Act 1973*, within the Health and Ageing Portfolio. The relationship between HIC and the Department of Health and Ageing is underpinned by a Strategic Partnership Agreement, and by an Output Pricing Agreement.

1.41 HIC contributes to the quality of Australian health care through efficient payments and program delivery. HIC also develops information and communications products to assist decision-making and improve health outcomes.

Table 1.5

HIC website and audited services

Agency website	www.hic.gov.au
	HIC's external Internet presence comprises a corporate site divided into four streams:
	About HIC—containing generic corporate information regarding HIC;
	• Your Health—a consumer stream dedicated to providing information and services relating to HIC programs, including Medicare, the Pharmaceutical Benefits Scheme (PBS), the Australian Childhood Immunisation Register (ACIR) and the Australian Organ Donor Register (AODR);
	• <i>Health Care Providers</i> —designed to provide information and services to health care professionals and those allied to the health care sector; and

	 Health Software Vendors—providing information and services to those software companies that specialise in computer programs for the health sector. These four streams provide a combination of static information and information that can be customised, downloadable forms, online registrations and transaction services using both secured and unsecured access.
The Australian Childhood Immunisation Register (ACIR) (Stage 3)	The ACIR is a national database containing information on the immunisation status of Australian children under the age of seven. The purpose of the ACIR is to increase the level of immunisation coverage for children against vaccine-preventable diseases through the provision of payments and information to immunisation providers and information to parents about immunisation. Its functions include:
	 providing comprehensive national information on the immunisation status of children under seven years of age;
	 providing parents and guardians with a statement that displays a child's immunisation details recorded on the Register as well as any immunisations that are missing for the child;
	 enabling immunisation providers and parents to easily check on the immunisation status of an individual child;
	 identifying geographic areas at high risk because of large numbers of unimmunised children;
	 providing an effective management tool for monitoring immunisation coverage at national, state and local levels to improve service delivery; and
	 sharing electronic data links with Centrelink to identify the immunisation of children for the purpose of Centrelink's administration of the Child Care Benefit and Maternity Immunisation Allowance.
	Health professionals access the ACIR via a secure area in HIC's website. The ACIR allows health professionals to check the immunisation history of a child, send immunisation data and produce immunisation reports. The secure area is only available to approved immunisation and information providers who have completed the online access request form. Information is collected through the secure area of the ACIR site or by using electronic data interchange (EDI). Information is also collected manually.
Pharmaceutical Benefits Scheme (PBS) Online (Stage 3)	PBS Online began in 2002 and its objectives are to improve the efficiency of processing claims for pharmacies and encourage the use of electronic services, resulting in savings to pharmacists and to HIC. Eventually, PBS Online will enable pharmacists to claim online in near real time. A key feature is the use of Public Key Infrastructure (PKI) to ensure security of transmissions. PBS Online will be implemented over the next two years.

Source: ANAO and agency documentation.

Structure of this report

- **1.42** The report is structured as follows:
- **Chapter 2** examines administrative policies and responsibilities explicitly established by the agency for monitoring and evaluating their Internet services;
- **Chapter 3** focuses on agency websites and portals, examining approaches to monitoring and evaluation, research on client use and satisfaction, and the way information is used to improve sites; and
- **Chapter 4** focuses on the Internet-delivered services audited, examining approaches to monitoring and evaluation, research on client use and satisfaction, and the way information is used to improve the services.

2. Administrative Policies and Responsibilities

This Chapter examines whether the agencies had clear administrative policies and defined responsibilities for monitoring and evaluation of Internet services. Better practice examples and opportunities for improvement are identified, where appropriate.

Introduction

2.1 A central purpose of providing services online is to give broad access to quality services for government clients with optimum use of public resources. Policies that are clearly defined, and practices that are consistent and well understood, are necessary to ensure that Internet services are achieving their objectives. Improvements to services that impact on actual clients cannot occur without intelligent use of information, based on systematic monitoring and evaluation.

2.2 Monitoring Internet services involves the systematic collection and analysis of a range of information to track performance, so that improvements can be made as part of their continuing operation. Monitoring should make use of diverse information sources, and include measures of overall and specific content use as well as patterns of access, identification of major client groups, and customer satisfaction.

2.3 Evaluation is the periodic assessment of the overall effectiveness and relevance of the service, considering the original objectives and the clients it serves. Evaluation takes account of monitoring information but asks more searching questions about benefits to clients, general social and economic benefits, efficiency and improvement.

2.4 The ANAO reviewed agency arrangements for managing agency websites and portals and selected Internet-delivered services, including whether responsibilities for monitoring and evaluation were defined. Following that, the ANAO examined the extent to which each agency in the audit had established clear policies or established practices for monitoring Internet services and evaluating their effectiveness.

2.5 Policies, in this context, refer to documented agency-level guidance which set out its approach to monitoring and evaluation of Internet services, including the specification of roles and responsibilities. The intent of the ANAO was not to emphasise the existence of a policy document in itself. Rather, that agency management had communicated and established a consistent agency-level approach to monitoring and evaluation of its Internet services that allowed for judgements to be made about performance at agency level rather than at just the program level. In the absence of documented

policies, the ANAO sought to identify practices used by agencies that provided such agency-level guidance.

Agency organisational arrangements for managing Internet delivery

2.6 Agency organisational arrangements for managing their websites and portals were diverse. To a large extent they reflected the evolving nature of the internal environment for managing Internet delivery. Most agency arrangements were installed recently and, as a consequence, their effect was not yet demonstrable. While one agency had placed responsibility for managing the agency website since inception within its media and communications area, most of the agencies audited were in the process of reconsidering appropriate organisational arrangements to encourage effective cooperation and coordination of website management.

2.7 Approaches being considered ranged from placing management responsibility within communication areas to forming cross-organisation committees. For example, one agency had placed responsibility for managing its website in the publications area and was forming committees to address overall strategy and content management. Another had left responsibility with the Chief Information Officer, but in addition had established an agency-wide web council with membership from each of the program areas, IT and public affairs. The council was to oversee the development of a web strategy, channel planning and standards for content provided by operational areas using the Internet.

2.8 Another agency had developed a management structure to oversee and manage its website. The structure comprised a corporate committee, responsible for setting the strategic direction for the website and making content decisions; and two supporting committees responsible for managing and reporting on information relating to the two outcomes for the agency.

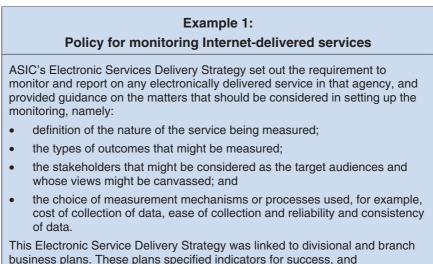
2.9 Overall, the ANAO found that agency organisational arrangements to support the management of their websites and portals were steadily evolving. The ANAO considers that, where agencies wish to draw content from many areas across an agency, it is important that they develop a clear governance framework, which defines accountability and reporting arrangements as well as roles and responsibilities of the various participants.

2.10 In contrast to the arrangements for agency websites, responsibility and accountability for monitoring and evaluating the audited Internet-delivered services was usually well established at the program level. For each of the services, there was a manager in the relevant business or program area with clear reporting and accountability arrangements from the service manager to their branch or division head.

Agency policies and practices for monitoring Internet services

2.11 The agencies audited had not yet developed an agency-level policy or guidance which set out information collection, monitoring and reporting requirements for their Internet services.

2.12 One agency, ASIC, had developed an Electronic Service Delivery Strategy which explicitly set out agency-level requirements for monitoring their Internet-delivered services. This is described further in Example 1.



responsibility for actions and achievement of strategies.

2.13 The ANAO considereds that ASIC's Electronic Services Delivery Strategy and its linkage with business plans, while not written or presented specifically as a policy, provides an effective approach to guiding monitoring of Internet-delivered services, and one which could be readily applied to other agencies. However, this Strategy, while covering Internet-delivered services, did not set out any requirements for monitoring the agency website nor periodic evaluation of the website and Internet-delivered services.

2.14 In the other agencies, there were no specific policies or established practices in place at an agency level on monitoring and reporting of Internet services. However, these agencies were preparing strategies for the future development of their agency websites and portals and advised the ANAO that they intended to set down monitoring and reporting requirements in those strategies.

2.15 At the service level, while no agency had a policy as such, all audited Internet-delivered services had business plans which provided the framework

for monitoring and reporting for that service. Two general approaches were evident in the way services and their reporting practices were established. The first approach used a structured planning process which, from initial establishment of the service, involved preparation of a business case for the service and definition of objectives and performance measures, which in turn determined the information and data to be collected.

2.16 The audit found an alternative approach to establishing a service and defining the performance framework. It involved going online with the service without necessarily having a business case or clearly articulated objectives and performance measures. Monitoring and reporting on the service was then done via the use of information that was readily available, either through the normal agency business planning process or through web statistics, and then reviewing the service after a year or so of operation.

2.17 The ANAO considers that the structured planning approach, with clear objectives and performance indicators, while still falling short of providing agency level guidance that could be applied at any time for any prospective service, was more likely to lead to appropriate information being available for evaluating effectiveness and improving service delivery for that specific service.

Agency policies and practices for evaluation of Internet services

2.18 At the agency website and portal level, the ANAO found that none of the agencies had articulated a requirement to conduct evaluations of existing services. As a result, there was no obligation on staff to evaluate and demonstrate the following aspects of performance:

- achievement of outcomes against service objectives and contribution to agency outcomes;
- cost effectiveness of the service;
- appropriateness and relevance to clients of the service;
- consistency with agency and Government objectives; and
- effectiveness of service provision using the Internet compared with other channels used for that service.

2.19 The absence of agency requirements for evaluation of their websites and portals is a risk for public accountability. It is of particular concern because agency websites and portals involve significant investment of resources and impact on large numbers of clients and significant programs.

2.20 At the program level, for audited services, only one agency, (HIC for ACIR) had articulated a policy for evaluation, and this provided for biennial evaluations.

2.21 Two agencies used a project management methodology as standard practice. This included a project review at the conclusion of the development stage of the project/service. The review was done before handing the management of the ongoing operation of the service over to the program or business area. The ANAO considered that this was an appropriate approach for review or evaluation of Internet-delivered services in their development phase.

Summary

2.22 Most agencies had identified areas for improvements in their websites, and were in the process of changing the governance and management arrangements for their agency websites and portals to ensure consistency of standards, design and presentation of content across the agency.

2.23 Agencies were yet to develop agency-level policies addressing requirements and responsibilities for monitoring of their Internet services. No agencies had policies for their evaluation. The absence of agency policies or requirement for periodic evaluation means there was no clear obligation to assess the overall effectiveness of Internet services or the actual benefits to clients, even after extensive reorganisation of responsibility for website management had been put in place. However, in some instances, business planning processes at the program level provided a structured means to partially meet the monitoring gap by specifying monitoring and reporting requirements for certain defined Internet-delivered services.

2.24 Overall, while there were various approaches used to address the issue of measuring the impact of Internet delivery by agencies, there were no examples of administrative policy or guidance that achieved all of the following:

- applicable at agency level;
- provided a consistent approach to monitoring and evaluation of web sites, portals and Internet-delivered services; and
- allowed for judgements to be made about agency (as opposed to program) performance.

2.25 The ANAO considers that a strategic agency-level focus on Internet services is necessary because of the current evolving nature of the Internet, the cost of investment, and the impact it may have on future delivery strategies for government services. Such a focus should be supported through the establishment and communication of clear policies for monitoring, reporting and evaluation of Internet services that include definition of roles and

responsibilities, specification of a range of monitoring information, and scheduling of periodic evaluations. This, in turn, would facilitate the establishment of consistent practices across the organisation and the collection of data that is useful in measuring and/or assessing agency performance.

Recommendation No.1

2.26 The ANAO recommends that agencies develop and implement appropriate policies for monitoring and evaluation of Internet services; define related roles and responsibilities; specify a range of monitoring information; provide for scheduling of periodic evaluation; and clarify reporting and accountability arrangements.

ASIC response

2.27 Generally agree. ASIC has found monitoring and evaluation to be highly appropriate and useful. It has also defined roles and responsibilities, and has scheduled when it requires a range of monitoring information to be reported and to whom. This has assisted ASIC in developing its Internet services.

ATO response

2.28 Agreed. The ATO recognises that the provision of online services results in more effective services to clients both in cost and convenience—and this meets the primary objective of the ATO's Change Program, to make the client experience Easier Cheaper and more Personalised.

2.29 The ATO regularly monitors the usage of, and client satisfaction with, its e-tax application and other online services—looking at performance and usage as well as the client experience—the results of this are used as feedback into a continuous improvement process.

2.30 The ATO continues to seek opportunities to provide better services to clients at lower costs to the ATO and the clients—and will continue to monitor existing services to ensure that they remain relevant and effective in changing circumstances.

CSIRO response

2.31 Agreed.

DEWR response

2.32 Agreed in principle. The contribution of programmes and services to the Department's outcomes and outputs is currently evaluated as part of its regular evaluation agenda. Where service delivery includes a component of the Internet, the contribution of the Internet usage to the outcomes and

outputs will be considered in programme evaluations. It should be noted, however, that it will not always be possible to distinguish the outcomes resulting from the Internet component and the broader aspects of service delivery.

2.33 In the cases of the agency portal, Australian Workplace, Australian Jobsearch and the National Indigenous Cadetship Project access to the website or portal would only be expected to contribute to the overall agency objectives to support the delivery of programmes and services such as Job Network, Community Work Coordinators or Indigenous Employment Programmes and measuring this contribution is likely to be extremely difficult. A balance needs to be struck between, on the one hand, the importance of Internet services to programme delivery and achievement of agency objectives and, on the other, the costs involved in establishing the means of collecting and reporting performance information to be able to monitor and evaluate Internet services.

HIC response

2.34 Agreed.

NOIE response

2.35 Agreed.

2.36 NOIE is currently developing a better practice checklist that will focus on monitoring and evaluation of online services. The checklist will complement an existing checklist on user testing.

2.37 It should be noted that the VAM describes 'Agency Strategic Alignment' as a key criterion in the value assessment. This aims to ensure that a program is aligned with the agency's business strategy, including key aspects of the agency's approach to investment, planning and delivery and their funding models. 'Assessing Strategic Alignment' helps to provide balance in the overall assessment of the program by measuring the degree of alignment of the investment with the outcomes that are most important for the agency.

3. Agency Websites and Portals

This Chapter focuses on agency websites and portals. It examines the information agencies are using to monitor performance of their agency website or portal, their research on users, their evaluations and how performance information and research is being used to improve agency websites and portals. Better practice examples and opportunities for improvement are identified, where appropriate.

Introduction

3.1 Performance information is a critical tool for improvement as well as for accountability. It encompasses the identification, systematic collection, assessment and reporting of information for both internal management decision-making and control purposes, and external performance reporting and accountability requirements.

3.2 An effective performance information framework enables judgements to be made on the achievement of outcomes and outputs. Performance indicators and relevant, accurate information are key contributors to effective corporate governance and provide a valuable link between staff activities and the overall achievement of agency and departmental objectives.

3.3 In this regard, the ANAO Better Practice $Guide^{25}$ set out broad guidelines for monitoring and evaluation, including the need for agencies to:

- look at service delivery from a user perspective;
- establish performance measures and reporting to keep managers informed in a timely and accurate way;
- collect other information, in particular user views, on an ongoing basis; and
- establish processes for making rapid and correct changes or alterations to service delivery.

3.4 The ANAO examined the core set of information that was regularly collected for monitoring the agency website or portal. The ANAO expected to find a range of performance information, some of which reflected the perspective of users, a systematic way of reporting that information, evidence of research on users of the website, and evaluation of the overall effectiveness of the website or portal to supplement regular performance monitoring. Where performance information was being reported to appropriate decision-makers, the ANAO looked for examples of the decisions made, or action taken, on the basis of monitoring information reported.

²⁵ ANAO, Internet Delivery Decisions: A Government Program Manager's Guide, 2001.

Performance information collected and monitored for agency websites and portals

3.5 None of the agencies had defined clear objectives and associated performance indicators for their existing websites and portals. This reflected the lack of a comprehensive approach to the initial establishment of sites. This may account for the limited range of website and user information that was being collected by agencies. Without clear objectives and associated performance measures, it is difficult for an agency to demonstrate that the agency website is linked to, and contributing to, agency outcomes and outputs.

3.6 Performance information about the agency website or portal was largely confined to web usage statistics and ad hoc user comments or feedback on technical performance or content accuracy.

3.7 All agencies collected some web statistics. In most cases, these were the ones available as a standard service in the proprietary web packages purchased from software providers or available from Internet Service Providers as part of the IT contractual arrangements. The web statistics collected were chiefly hits or unique visits, page views, and the most frequently used pages or downloads. Types of web statistics commonly used are described in Table 3.1.

Table 3.1

Type of statistic	What the information can tell a manager
Unique visits	Shows numbers of users accessing the website over a specified time period. If compared over time, the data can demonstrate whether the site usage is increasing or decreasing. Taken alone, this measure does not indicate whether users found the information they were seeking.
Page views	Provides data on frequency of access for each page (or URL). This indicates levels of use which may demonstrate trends in content or services sought. Alternatively, it may reflect the design of the site. High numbers may also indicate a mandatory obligation on members of the public. For example, a peak in visits to the ATO site around the end of the financial year would not reflect a sudden improvement in the content. If compared with previous years, it may show that more people were lodging tax returns online.
Hits	Measures selection of an item, like a page or an image, from a Web server. One page can be measured as a number of hits, depending on items such as images within the page. Hit measures can be misleading. For example, if page design is changed then hit rates may also change, making comparison of hit rates over time inaccurate.

Types of web statistics collected for the agency websites

Type of statistic	What the information can tell a manager
Total page views	When not linked to users, this information could indicate multiple visits from a single user, or single visits from many users. It does not demonstrate how people are using the site or the purpose and success of their visit.
Top ten most commonly accessed pages	Since this is a comparative indicator, it is potentially useful in determining which parts of the website are meeting user's needs more than others. However, it also reflects the structure of the site. The major entry pages, for example, the homepage, search page and pages linked to government portals are consistently in the 'top ten'.
Downloads	Measures the frequency of successful downloads of documents. This information is meaningful when related to other known events. Some services use download statistics to measure anticipated responses from the groups affected by policy changes.
User origin	Provides the originating Internet provider address. This may be useful, for example, where media organisations or overseas organisations can be identified.

Source: ANAO analysis based on agency documentation.

3.8 Web statistics measure the activity of the site, and are not synonymous with the activity of individual users. The measure of hits, in particular, may be influenced by changes in the design of pages, rather than actual use.

3.9 Web statistics measures such as those listed in Table 3.1 are less useful when taken alone at one point in time. They become more useful when collected and viewed over time, so that trends or patterns of activity can be seen. For this reason, the ANAO considered that web statistics should be supplemented with information about client uses of the website and their satisfaction with its design, navigation, searches, functioning, and content. The most appropriate use of web statistics was as a diagnostic and descriptive measure. An example of an agency's use of web statistics is described below.

Example 2:

Use of web statistics for monitoring Internet services

ASIC, on the FIDO part of the agency website, reviewed web statistics on a monthly basis. The FIDO editorial team, at its regular meeting, compared the statistics for the month with the same month of the previous year to ascertain whether there were any trends in website use over any given year.

ASIC also set up 'watches' on particular pages to track usage of specific content on the site. These watches were timed to record usage before and after a press release related to the content. In this way, ASIC obtained some indication of the effect of their media communications.

3.10 In recent years, web statistics packages have become more sophisticated and it is now possible to adapt web statistics to give different views of the activity on a site. Measures are available in some web statistics packages that can reveal differences between client groups. One example is data on pathways around the site where the software traces the main sequences taken by site visitors. However, this capability was not used by any of the agencies audited.

3.11 When used in combination with other measures, web statistics can provide a continuing picture of usage of the site that is useful for monitoring purposes. As well, the information can be communicated effectively using graphs and other forms of visual presentation.

User comments from the agency websites and portals

3.12 Every agency had some form of user comments mechanism on the agency website. This ranged from user comments windows, which collected comments on the entire website, to feedback boxes on some specific pages in the site.

3.13 In all agencies, user comments were forwarded to the relevant service area and, consistent with their devolved authorship arrangements, the service area was responsible for addressing the issues raised.

3.14 In general, agency website managers were not collating or analysing information collected about the agency website or portal through user comments windows and mailboxes. Agencies were also not obtaining much information about the users themselves and their purposes in visiting the site. Customer comments were used chiefly for alerting the agency to problems such as links to other sites which were not working, or to inaccurate content, rather than for gathering information about the users and their experience of the site.

3.15 One example of better practice, described below, was observed at DEWR, where additional information collection methods were being developed, including an online survey, to enhance the information base of user groups.

Example 3: Online survey of user groups

DEWR was developing an online 60 second survey which aimed to capture a variety of information from users such as demographic information and geographic location, navigation and access experience, reasons for using the website and suggestions for improvement.

Comments from other sources

3.16 The ANAO found some evidence of the systematic use of public comments received through other agency channels for improvement of the website or portal. Sources included a complaints unit, call centres or telephone information lines. In one instance, the agency kept a list of the action taken to address the matters raised in complaints.

Reporting performance information about the agency website and portal

3.17 In all agencies, reporting of performance information beyond the manager responsible for the agency website or portal was confined to summary information about visits to the site. This may reflect the fact that the agencies had not specified objectives and defined performance indicators for their websites or portal. As discussed in Chapter 2, in most cases, the website was, until recently, not part of agency business plans and therefore was not included in the reporting against plans. For all the sites, the agencies were not able to demonstrate the linkages between performance of the site and agency outcomes and outputs.

User research for agency websites and portals

3.18 Research about users of agency websites took several forms and included customer satisfaction surveys in DEWR and CSIRO, and consultation with stakeholder groups by ATO. ASIC used an external panel of consumer advisors to provide regular advice and suggestions about how the website might better meet consumer needs.

3.19 None of the agencies had conducted detailed user research prior to establishing the agency website or portal. This was not surprising, considering the urgency at the time to create an Internet presence and the inability of users to comment on something that did not yet exist. The ANAO convened a focus group of representatives of agencies in the audit. In the focus group, representatives observed that, for a site with very diverse clients, for example, tax payers or those interested in employment and workplace issues, a more productive approach was to launch a site, see how people actually used it, then modify it using this knowledge.

3.20 Consistent with the views expressed in the focus group, the ANAO found that the majority of agencies had conducted some detailed research since the websites or portal were established. The research had informed the redevelopment of their agency site and was leading to greater knowledge of how users were accessing the site and their experience in using it. Examples are as follows:

- ATO had conducted extensive consultation with clients/users, collaborative design sessions and an online survey of internal agency staff in order to review the presentation of agency information on the agency website. This research was complemented by an assessment of users' content experience, which included a detailed analysis of site content based on consultation with a small sample of users from all client segments identified for that agency. Research findings highlighted some problems for users in locating the information they sought. The findings of these research projects were used to inform the redesign of the site and to obtain senior management's endorsement for changes to the agency website.
- DEWR had conducted market research to explore awareness of agency websites among the target audience and key messages that would encourage increased visits to sites. The methods included discussion groups with target audience members and interviews. While the research was primarily directed at identifying appropriate messages for communication with job seekers, it also looked at perceptions of the agency's various websites and barriers to use. Target audiences were segmented according to their likely use of the Web.
- CSIRO conducted market research to support the redevelopment of an agency website which included identification of major internal stakeholders, their web-related information and communication purposes, a review of published customer research, focus groups with external users of the website and a staff survey. This initial study was to be followed by user analysis in later stages of redeveloping the website.
- HIC had conducted market research to assess the reactions of the target markets to two prototype sites. The research method involved in-depth interviews with mixed groups of target users with Internet experience. During the discussion, participants were asked to conduct searches in order to determine ease of site navigation and reactions towards content placement. They were also allowed free time to 'play' and provide spontaneous feedback about the site, its content and navigation aids. The findings from this research provided information to underpin a significant redesign of the site.
- ASIC had conducted an online user survey which obtained demographic data about users, and explored questions of navigation and ease of identifying information.

3.21 In compliance with government standards²⁶, most agencies included a requirement for websites to be accessible to people with a range of disabilities, in their design specifications. However, the ANAO found that only the ATO tested the accessibility of online content with actual users (described in Example 4). Others used experts within the agency, or staff with disabilities, to review web content.

Example 4: Accessibility testing by actual users with a disability The ATO had commissioned a review of the accessibility of its agency website by a national agency for people with vision impairment. The process involved actual users with vision impairment in reviewing the website. ATO then took action to design accessible sites for people with vision impairment and

action to design accessible sites for people with vision impairment and enforced this as a consistent practice throughout the agency for any area developing a website.

3.22 The ANAO considers the work of ATO to be an example of better practice because of the involvement of actual users with vision impairment in the review of the website. Agencies should profile actual users with a disability and seek their perspectives in developing the online content of websites or portals.

Evaluations and reviews of agency websites and portals

3.23 The ANAO found that evaluations which aimed to gain an overall assessment of the performance of agency websites or portal, including the benefits for users, had not been conducted.

3.24 In the previous chapter, some of the implications of the absence of policy on periodic evaluation of overall effectiveness of websites and portals or Internet-delivered services were identified. The audit also noted that agency websites were set up without clearly defined objectives. This situation, combined with the absence of evaluation, means that the investment in agency website or portal development is occurring without any quantitative or qualitative evidence of the effectiveness of these sites as a means of communicating with and meeting the needs of agency clients or users and the broader e-government policy agenda. While this situation was understandable in the early days of Internet delivery, the ANAO considers that, now that the

²⁶ Government policy was that:- 'From 1 June 2000, all websites are to be tested by agencies for accessibility, and all new website contracts are to include accessibility as a key performance measure.' http://www.govonline.gov.au/ projects/egovernment/better_practice/accessibility.htm>.

Internet is a standard means of communication for all government agencies, agency websites and portals should be subject to the same rigorous review and evaluation as any other program or service delivery mechanism.

3.25 While no overall performance evaluations were evident, the ATO had conducted some studies to assist development of particular aspects of their website, in 2000 and 2001, and CSIRO had undertaken two studies in 2001.

3.26 For the ATO, early research took the form of comparing sites, analysing a range of web statistics and reviewing sites for accessibility. The 2002 study compared the site with others and made recommendations about the accessibility of the site for people with impaired vision through improvements in navigation.

3.27 CSIRO undertook two studies in 2001. One was a comparative analysis of websites of competitors and collaborators in Australia and internationally. The other study was a review of the organisation's communications strategy, including the agency website, intranet and extranet. This review recommended that the site be restructured around user groups and that audience testing be used as part of the redevelopment process. A range of monitoring tools was to be reviewed as part of the redesign process. The studies have been used to develop the new website CSIROLive.

3.28 In less than 10 years, the Internet has become an important means to improve access to government information and services, and clarify the institutions and process which shape policy and bring government benefits to particular groups. The ANAO considers that agencies need to recognise these developments and give particular attention to the effectiveness of their online work for the groups they are meant to serve and its power as a communication medium. Evaluation should cover both the content of information and transactions, and the means that are used to communicate it.

Taking action on monitoring information and evaluation

3.29 The ANAO found little evidence that agencies were systematically considering performance information at executive management levels. Few measures other than frequency of visits were reported to these senior levels. However, executive level involvement in decision-making had occurred in response to results of website reviews.

3.30 Monitoring of user comments was occurring at the level of the agency web manager. As mentioned earlier, in two agencies, there was evidence of systematic use of this information and action to address identified problems, such as navigation difficulties and links to other sites that were not working.

3.31 As described above, in ATO and CSIRO, reviews of agency websites provided the basis for complete redevelopment of their websites.

Summary

3.32 Agency websites and portals were not established with clear objectives and associated performance indicators. Agencies relied largely on readily available web statistics as the main source of performance information. Although they provided summary views of site activity, web statistics did not, by themselves, suggest areas for improvement. Managers were only able to interpret the information when the web statistics (consisting of trend analysis over time) were combined with user research that accounted for the observed patterns.

3.33 All agencies provided the facility for user comments. However, this information was used chiefly for alerting agencies to problems such as links to other sites that no longer worked or inaccurate content, rather than for gathering information about users and their experience of the website.

3.34 None of the agencies had conducted detailed user research to inform the development and content of their websites. However, the ANAO found that following the establishment of agency websites, the majority of agencies audited had commissioned some detailed user research to inform redevelopment of their websites.

3.35 No evaluation of the overall effectiveness of the agency websites and their contribution to agency outputs and outcomes had occurred or was planned. The absence of both policy and practice for overall performance evaluation means that the investment in agency website development and redevelopment is occurring without evidence as to the effectiveness of these sites as a means of engaging with, and providing services to, the public in general and clients in particular. The ANAO found little evidence that agencies were systematically considering performance information for their websites and portals at executive management level because few measures other than frequency of visits were being reported to those levels. However, executive level involvement in decision-making had occurred more in relation to results of website reviews.

Recommendation No.2

3.36 The ANAO recommends that agencies clearly define objectives for their websites and portals; include the objectives in relevant planning documents; and conduct periodic evaluations in relation to these objectives.

ASIC response

3.37 Generally agree. ASIC has found defining objectives for the sub-site and for the services that the ANAO examined to have been essential to their success, and has found that ongoing and periodic evaluation has significantly contributed to the improvement of those services.

ATO response

3.38 Agreed. The ATO continually monitors the usage of its websites both from a performance and a user experience perspective.

3.39 The ATO uses a formal methodology which continually evaluates, designs and validates the content and usage of its websites with both internal and external clients. This methodology is consistently applied to ensure that the ATO's websites are aligned both to business goals and the needs of clients.

3.40 The methodology used is regarded as Best Practice in the area of website design and continuous improvement.

CSIRO response

3.41 Agreed.

DEWR response

3.42 Agreed.

HIC response

3.43 Agreed.

NOIE response

3.44 Agreed.

3.45 The DAM & VAM assist in providing a consistent mechanism for determining if there is a *prima facie* case for an online service delivery program. Once established, the VAM will assist in scoping realistic objectives for the program.

Recommendation No.3

3.46 The ANAO recommends that agencies prepare and use web statistics that will contribute to monitoring performance against objectives of the agency site and be used to improve service delivery. These statistics should include measures that highlight differences between users, to supplement summary statistics.

ASIC response

3.47 Generally agree. ASIC has found a range of web statistics contributes to monitoring performance. Statistics we have collected have highlighted differences between users, and have enabled ASIC to develop services on a modular basis that take different user needs into account.

ATO response

3.48 Agreed. The ATO has in place a Performance Team whose responsibility is to monitor the performance of the websites. This team regularly reports to management on the performance and usage of the websites. This team also monitors the industry and advises on the availability of tools and techniques that will improve the monitoring and reporting process.

CSIRO response

3.49 Agreed.

DEWR response

3.50 DEWR noted the recommendation. DEWR utilises web statistics extensively in managing its Internet services.

HIC response

3.51 Agreed.

NOIE response

3.52 Agreed.

3.53 The DAM helps agencies to define and establish demand data, target users and stakeholders and helps in establishing baseline data. Steps 2 and 3 specifically relate to understanding demand and capturing the demand associated data for further measurement and monitoring

Recommendation No.4

3.54 The ANAO recommends that, in order to ensure services remain relevant and responsive to user needs, agencies:

- conduct research to reveal access to the agency site by different users, the needs of users, and the benefits users gain from Internet services; and
- involve people with disabilities in the testing of agency websites for accessibility.

ASIC response

3.55 Generally agree. ASIC has conducted extensive research, including independent market research, to plan and test Internet services. This research has included people with disabilities in accessibility testing.

ATO response

3.56 Agreed. The ATO has conducted extensive consultation with clients and users of its websites and Internet Services including collaborative design forums and surveys. This is an ongoing process which the ATO regards as fundamental in the delivery of its Easier, Cheaper and More Personalised program of change.

CSIRO response

3.57 Agreed.

DEWR response

3.58 DEWR noted the recommendation. DEWR utilises useability testing as part of the development of web service applications.

HIC response

3.59 Agreed.

NOIE response

3.60 Agreed.

3.61 NOIE has recently conducted a pilot project with a number of agencies to develop and document a re-useable and scalable process to help agencies determine what content customers need and how they prefer that content to be presented. This involves the following:

- profiling—consulting typical customers to determine the most important information and services they expect from a website. This helps to identify and prioritise content to be made available; and
- useability testing—observing how typical customers use websites to find relevant content. This helps determine how best to present information.

3.62 A plan to disseminate the results of this project to other portals and, more widely, to Australian Government agencies is being developed.

3.63 Separately, the DAM encourages agencies to obtain knowledge about the target audience for the program and to consult with intended users about proposed new services in order to gain an understanding of user needs. A clear understanding of user needs will assist the agency in translating needs into demand and will enable the agency to articulate the impact of this demand on the agency's service delivery strategy.

4. Internet-delivered Services

This Chapter focuses on selected Internet-delivered services. It examines the information agencies are using to monitor the performance of their Internet-delivered services, their research on users, evaluation of Internet-delivered services being undertaken, and how performance information and research is being used to improve Internet-delivered services. Better practice examples and opportunities for improvement are identified, where appropriate.

Introduction

4.1 Chapter 3 set out the rationale for performance monitoring and evaluation and the better practice guidelines that have been available to agencies since 2001.

4.2 For the Internet-delivered services audited, as for agency websites and portals, the ANAO examined the core set of information that was regularly collected for monitoring purposes. We expected to find a range of performance information, some of which reflected the perspectives of users, a systematic way of reporting that information, user research, and evaluation of the overall effectiveness of the service. Where performance information was being reported to appropriate decision-makers, the ANAO looked for examples of the decisions made, or action taken, on the basis of that information.

Performance information collected and monitored

4.3 Information used to monitor performance of Internet-delivered services differed from that used for agency websites and portals. Most services had clear service objectives and were monitoring a set of information that showed achievement against those objectives. For this reason, the ANAO considers the information to be appropriate.

4.4 For example, ATO's *e-tax* (described in Example 5) and ASIC's EXAD had the objective of moving clients to lodge information online rather than by mail. In both instances, the numbers of online lodgements received was monitored and measured against numbers lodged in previous years and against targets. EXAD was also monitoring the take-up rate for online lodgements and comparing online lodgement with other channels.

Example 5:

Performance information for monitoring

Performance information collected by the ATO for *e-tax* was systematically analysed and used in monitoring and when negotiating for improvements for the next *e-tax* release. Information regularly collected included performance indicators, such as numbers of lodgements, conversions from other means of making a personal income tax return to *e-tax*, load management and calls to the IT help desk. Also, at the end of every tax season, information was compiled into a report which covered:

- numbers of lodgements against the target for the year;
- numbers of conversions to *e-tax* from other methods in the last year;
- numbers of completed lodgements in relation to initial registrations compared with the previous year; and
- lodgement load patterns over the season.

4.5 The ANAO considered the broad range of performance information compiled and analysed by the ATO in order to monitor *e-tax* to be an example of better practice.

4.6 The ACIR provided an example of better practice in defining and using performance information tied to service objectives, as evidenced in Example 6.

Example 6: Performance information linked to objectives	
ACIR Objective	Examples of performance information used to monitor achievement of objective
Increasing coverage	 Number of children registered with ACIR Number/percentage of children who have received valid vaccinations Number of children who have received valid vaccinations by a selected provider Number of children whose parents have withdrawn consent Vaccinations due/overdue report by locality, provider and divisional area
Promoting immunisation through payments and information to health professionals	 General Practice Immunisation Incentives (GPII)- Practices participating Immunisation coverage rates of practices registered for the GPII Number of General Practitioners supplying immunisation data to the ACIR General Practitioners mmunisation incentives payment report

Improving service delivery	 Data volumes and error rates Accuracy of provider contact details Customer complaints received and investigated Customer complaints and queries via call centre Payments processing times
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4.7 Two services, CSIRO Enquires and DEWR's NICP, used multiple channels for delivery including telephone, fax, mail and Internet. Reliance on multiple channels provided an opportunity to compare the use and effectiveness of different methods of communication and the reasons that client groups chose the channels they used. However, in these instances, monitoring of the comparative effectiveness of each was not taking place.

4.8 Web statistics were used as only one source of performance information by the managers of Internet-delivered services, in contrast with agency sites where web statistics were the major source of performance information. Measures included number of unique visitors and the origin of visits. However, one service, ASIC's *FIDO News*, gathered statistics about visits to the FIDO website and compared it with information about the timing of release of the e-newsletter *FIDO News* which promoted that content on the site. The comparisons made it possible to discern trends in use of particular pages on the FIDO website.

4.9 A few services monitored information about processing efficiency. For example, HIC's ACIR monitored processing times for monthly payments and the number of child history statements sent within target timeframes. ATO monitored the turnaround time for payments of tax refunds.

4.10 Data quality was also tracked. For example, HIC monitored ACIR's data error rates and accuracy of provider contact details. These indicators were linked to service level standards and monitored against these.

4.11 Two services, HIC's PBS Online and ASIC's EXAD, were in the early stages of development at the time of audit fieldwork. Both demonstrated project reporting against project plans, and monitored performance linked to achievement of project milestones. The ANAO found these performance measures to be appropriate for the stage of development of each project.

User comments on Internet-delivered services

4.12 Nearly all services collected and monitored user comments. Table 4.1 sets out the different performance indicators collected and how service managers used this information to monitor their services. Other forms of user research are described later in this Chapter under 'User research for Internet-delivered services'.

Table 4.1

User comments and information collected by services

Performance information	Collection method or source	What it tells a manager
Numbers and types of complaints	Collected from a variety of mechanisms including collated reports from complaints units or from call centres/helpdesks. (One service also collected this information from online chat forums).	Demonstrates trends in problems experienced by users and identifies areas for improvements.
Numbers and types of call centre/helpdesk queries	Received via call centre/helpline reports (including online chat forums).	Demonstrates trends in user experiences. For example, information can be used to identify problems users have experienced with the service and assist managers to target areas for improvement.
Levels of customer satisfaction with the service and extent of positive/negative user feedback	Collected via a number of different means across the services. Methods of collection included: annual customer satisfaction surveys; brief online surveys; one-off surveys; and email/feedback forms	Demonstrates trends in problems experienced by users and identifies areas for targeting improvements.
Extent of positive/negative comments from individual users and representative user groups	 Collected via: stakeholder consultation for example, consumer advisory panels; and ad hoc consultation with users 	Provides more detailed information about user experiences and assists in design, development and improvement of the service.

Source: ANAO analysis based on agency documentation.

4.13 Table 4.1 demonstrates that information from user comments was providing managers with a range of information about technical problems and also about users' experiences of site design and content.

Reporting performance information

4.14 All service and program managers were reporting performance of Internet-delivered services within existing agency business planning processes. In general, information reported beyond the service manager to the

executive level was confined to one or two indicators which reflected the objectives of the service.

4.15 The ANAO found examples of effective reporting to senior management using visual presentation of a range of statistical and descriptive information in two of the agencies audited. Through this, senior managers could recognise and appreciate the contribution of Internet delivered services, leading to more involvement and discussion of improvements to the services.

4.16 The ANAO noted that, in those cases where the linkage between service objectives and agency objectives was made explicit within business plans, it was possible for agencies to demonstrate that the services were contributing to agency outcomes. Examples 7 and 8 are relevant in that respect.

Example 7:

Linkages between service and agency objectives

The HIC had a strategic plan which set out key result areas for the HIC. The corporate business plan described major initiatives over a three year period in support of the strategic plan. Performance of the HIC was measured against the corporate business plan and reported using a balanced scorecard. The scorecard approach involved collecting and monitoring performance information across a range of measures including: customer satisfaction; financial performance; internal business growth; and development of services.

Divisions and state offices had business plans which were aligned to key results areas outlined in the strategic plan, and set out performance indicators and reporting responsibilities for branch and service levels. Performance information was reported monthly to the Business Management Committee against targets for the balanced scorecard, and the Business Management Committee in turn reported key information to the HIC Executive.

ACIR was part of the Program Management Division and PBS Online was part of the Business Improvement Program. Both had clearly articulated service objectives and performance measures which were consistent with the HIC's key results areas.

Example 8:

Linkages between service and agency objectives

DEWR's JobSearch service was linked to Portfolio Budget Statements outputs through the framework of the Group, Branch and Section business plans. The business plans set out targets such as levels of satisfaction for employers. Awareness of the links between the provision of the JobSearch services and agency outcomes was reinforced by the reporting of four indicators in DEWR's Departmental Outcomes and Outputs Reporting System (DOORS). These were:

- the percentage share of the Internet jobs market;
- numbers of accesses through stand-alone kiosks;
- average number of page accesses per month; and
- the number of vacancies in the JobSearch database compared to the management target.

For JobSearch, the Portfolio Budget Statements 2003/04 set a target whereby vacancies listed on JobSearch were to be not less than 40 per cent of the total Internet listed vacancies notified in the ANZ Job Advertisement series.

Additional performance indicators described in the section business plan included employer satisfaction rates, numbers of indigenous vacancies and JobSearch page accesses. Targets were set for numbers of page accesses and visits compared with general employment websites and government websites.

User research for Internet-delivered services

4.17 User research took several forms and included user surveys, market research, and consultation with stakeholder groups and representatives.

4.18 Fewer than half of the service managers undertook user research when planning and establishing their services. However, once established, most service managers conducted ongoing user research which was used for regular monitoring.

4.19 The ANAO considered one Internet-delivered service, CSIRO's Sentinel Hotspots, to be an example of better practice in terms of its user research at development stage as described in Example 9.

Example 9:

User research in the development of a new service

The Sentinel Hotspots team developed a process for capturing user views on the design and use of the service as well as soliciting suggestions for opportunities for improvement. This process encompassed a series of workshops with prospective emergency services users across Australia to gather their views on the design and usability of Sentinel Hotspots. User comments were then employed to make technical adjustments and other improvements to the service.

Sentinel Hotspots also made use of a reference group for advice on how they were accessing the service and its perceived benefits. Ad hoc advice on the performance and use of Sentinel Hotspots was also provided by users via email and telephone. This advice contributed to the design and development of the service.

4.20 Agencies used a variety of methods to conduct user research on their Internet-delivered services. These included:

- in-depth consultations with a series of focus groups, supplemented by one-on-one and group interviews;
- consumer advisory panels and stakeholder representative groups to obtain perceptions about the adequacy of the service in meeting user needs;
- user surveys to test possible site enhancements;
- surveys of target groups about specific aspects of services;
- questions about Internet services within agency customer satisfaction surveys;
- studies of potential demand for a pilot Internet service;
- literature reviews to identify best practice and to avoid repeating previous user research. For example, one agency reviewed best practice consumer education strategies for Indigenous people before designing its Internet service. In this case the research led to a decision to use a different medium than the Internet;
- on-site observation and mapping of business processes used by groups for whom an Internet service was being designed; and
- usability testing of content and navigation of Internet services. This applied to a service that was targeted to user groups who did not have regular access to the Internet, but who were required to complete online transactions to comply with government regulations.

4.21 There is some evidence from this audit that research methods applied to the Internet which adapted earlier forms of audience and media research, for example, focus groups, were not adequate for the new medium of the Internet. This is because they do not provide information specific to the content interests, navigation practices or actual uses of particular groups. The discussion with representatives from audited agencies gave examples of research, based on focus groups, which was used to represent the views of the broad population. Results from the focus group research had been misleading when used to indicate likely demand for, or responses to, Internet services.

Evaluation of Internet-delivered services

4.22 More than half of the services audited had commissioned external studies or reviews. Services which had not been the subject of reviews or external research were either still in development or had only been operating for a short time.

- **4.23** Review topics included:
- efficiency and effectiveness of service workflows, business processes and service operations;
- user characteristics and use of help desks;
- accessibility for vision impaired clients;
- data capture and quality;
- assessment of performance indicators;
- assessment of user views prior to implementation of new service functionality; and
- reviews of operational efficiency.

4.24 These studies and reviews supplemented regular monitoring and enabled managers to answer questions that could not be answered in the course of routine collection of performance information.

4.25 Nevertheless, there were no instances of planned or conducted evaluations of Internet-delivered services which aimed to assess overall performance of the services against objectives, or which assessed the benefits and costs from the services for specified user groups.

Taking action on monitoring information and evaluation

4.26 In contrast with the situation for agency websites and portals, taking action on performance information, particularly at program manager level, was evident for all services, reflecting more extensive performance

information and the greater alignment of performance information with service objectives.

4.27 From their reviews of performance information on their services, agencies addressed issues of three kinds, namely:

- technical and systems capacity issues highlighted by web statistics and system performance monitoring;
- content or information issues, raised through user comments and monitoring of use patterns; and
- business process issues raised through monitoring client usage and process efficiency, in those services where clients make business transactions through the service.

4.28 The CSIRO Sentinel Hotspots project team adopted a systematic approach to collecting and monitoring performance information that was relevant to the operational effectiveness, design and use of the pilot Sentinel Hotspots website. The ANAO considers that this contributed to appropriate and effective action being taken to address the implications of data collected, and to make improvements to service delivery. This is described further in Example 10.

Example 10:

Action for improvement based on monitoring information

During the January 2003 Canberra bushfires, regular monitoring of technical information and web statistics allowed the Sentinel Hotspots project team to identify limitations in its capacity. The project team was able to attribute heavy usage to a new group of users accessing the site (the general public and, in particular, the media) following the official launch of Sentinel Hotspots in January 2003. The team responded by developing a separate secure site, colloquially known as 'son of Sentinel' for exclusive use by emergency management users. The team also facilitated the easy access of information and the development of special content required by the media to limit their time spent on the site.

4.29 The ANAO also considered the HIC's ACIR systematic review and actioning of recommendations from evaluations (described in Example 11) to be an example of better practice.

Example 11:

Action for improvement based on monitoring information

As part of its Strategic Partnership Agreement with the Department of Health and Ageing, the ACIR's operations are subject to biennial independent evaluations, managed by the Department and overseen by the ACIR Management Committee.

Recommendations from these evaluations are incorporated into the ACIR's business plan for the following year and progress against recommended actions is reported quarterly.

4.30 DEWR's JobSearch provided an example of how email comments from users can be used as part of the ongoing monitoring process. In this instance, IT staff who received email feedback from users counted and sorted emails by topic before disseminating each email to the appropriate service area for action. The Department responded to all emails received in this way. As well, processes were in place to ensure that these responses occurred in a timely fashion. Trend data from emails contributed to decisions about three-monthly systems upgrades.

4.31 In relation to the services which had been operating for sufficient time to warrant special studies or reviews, the recommendations from agency studies had either been implemented or were in the process of being implemented.

Summary

4.32 The ANAO found that a core set of information for monitoring performance and use had been developed for most of the audited Internet-delivered services. In contrast to the limited information used for monitoring agency websites, the information collected and monitored for most of the services was adequate. It was aligned with pre-defined service objectives and encompassed a variety of sources and collection techniques. The ANAO considers that this contributed to appropriate and effective action being taken to address the implications of data collected and to make improvements to enhance service delivery.

4.33 Managers of Internet-delivered services utilised existing agency business planning processes to report on their performance. The ANAO found that the service contribution to agency outcomes and outputs was best demonstrated when an agency's planning documents referred to the relationship between the service and higher-level agency objectives. Furthermore, reporting against service objectives informed decision-makers and other stakeholders of the broader role of the service and facilitated accountability and management review of its relevance.

4.34 While most agencies had not conducted user research prior to establishing the services, they had commissioned several forms of user research once services were operating. Agencies applied the results of user research to improve service delivery. Research included customer satisfaction surveys and market research of specific user groups.

4.35 In contrast with the situation for agency websites and portals, taking action on performance information, particularly at program manager level, was evident for all services. This reflected more extensive performance information and the greater alignment of performance information with service objectives.

4.36 Most agencies had reviewed aspects of their service provision, and used the results to improve services. However, no overall evaluations of the effectiveness of Internet services in relation to objectives had been planned or conducted. As already discussed in relation to agency websites and portals, the lack of agency policy on evaluation (identified in Chapter 2), combined with the absence of the practice of evaluation, means that investment in Internet services is occurring without any quantitative or qualitative evidence of the effectiveness of these services in meeting their objectives. While this situation was understandable in the early days of Internet delivery, the ANAO considers that, now that the Internet is becoming a standard means of communication, and in many cases, service delivery for all government agencies, Internet delivery should be subject to the same rigorous review and evaluation as services delivered in any other manner.

Recommendation No.5

4.37 In future development of Internet-delivered services, the ANAO recommends that agencies, commensurate with the scale of the proposed service:

- develop business cases and clear objectives for services, tied to their corporate priorities and strategies, before they commence defining objectives in relation to the intended clients for the service;
- specify the information required to monitor and assess performance of services, and to demonstrate its contribution to agency outcomes and outputs;
- ensure that their reporting framework provides an analysis of relevant information on internet delivered services to senior management; and
- plan and conduct periodic evaluations of the overall effectiveness of services, considering agency objectives as well as benefits and costs for the major client groups.

ASIC response

4.38 Generally agree. As acknowledged by the ANAO, ASIC has adopted a 'business case' approach, linked to the agency's strategic and business planning. This has enabled us to develop Internet services efficiently, using modest resources, while still offering major benefits for user groups.

ATO response

4.39 Agreed. The ATO has in place a mandatory policy for the end to end conduct of projects which include the requirement for Concept Briefs and Business Cases to be prepared and approved prior to commencement. This process includes the requirement to define expected outcomes and success factors.

4.40 The e-tax application has been a model for development of online applications in the ATO. It has been successful beyond expectation.

4.41 The ATO uses the practices that were successful in e-tax as the model for online application design and development, and will continue to actively monitor industry trends to ensure that its design and development practices remain in the forefront of best practice in this area.

CSIRO response

4.42 Agreed.

DEWR response

4.43 Agreed.

HIC response

4.44 Agreed.

NOIE response

4.45 Agreed.

4.46 The Demand and Value Assessment Methodologies aim to provide agencies with plausible, transparent and justifiable estimates of demand. They will have a documented basis to establish a value assessment of the program and they will have created demand estimates which should directly fed into a business case. They will also create baseline data for ongoing monitoring.

Canberra ACT 20 February 2004

Oliver Winder Acting Auditor-General

Appendices

Appendix 1: Full Agency Responses

The following are full responses from various agencies (excluding responses specific to particular recommendations).

ASIC Response:

Summary

ASIC considers that the audit usefully reviews various internet service delivery monitoring and evaluation procedures and agrees with all recommendations. ASIC was pleased to note that audit discussion papers provided by the ANAO commented that ASIC was performing well against the criteria the ANAO had developed for the audit.

ANAO reported favourably about ASIC

The current ANAO report is framed in general terms, with some qualifiers. This could mislead some readers about ASIC services. In a discussion paper of July 2003, written specifically about ASIC internet services, ANAO made numerous complimentary statements.

ANAO found that ASIC

- provided a framework to ensure that internet services, have clear business objectives and performance measures for monitoring and reporting.
- demonstrated good practice in research undertaken on user needs and audiences at the planning stage,
- was systematic in collecting feedback from users, once services were operational
- tied performance information to strategies and targets in business plans and relevant ASIC strategies. These in turn were all aligned with ASIC's strategic objectives.
- monitored performance information appropriately for the objectives of the services audited

Clear ASIC objectives and performance measures

ASIC set objectives and monitors and evaluates its services regularly and in detail. ANAO 's discussion paper on ASIC services stated:

The ASIC- wide business planning process provides a framework which ensures that all services, including Internet delivered services, have clear business objectives and performance measures for monitoring and reporting. ...ASIC development of Internet delivered services and website had been well researched, planned and managed according to plan, to achieve ASIC strategic goals.

Information collected and reported about the Internet delivered services was tied to strategies and targets articulated in business plans and other relevant ASIC strategies such as the Consumer Education Strategy and the Electronic Service Delivery Strategy. These in turn were all aligned with ASIC's strategic objectives.

Good practice in user research

ASIC considers a wide range of research and feedback. ANAO concluded, in its discussion paper:

Good practice was demonstrated in research undertaken on user needs and audiences at the planning stage for prospective services and education campaigns. Collection of feedback from users, once services were operational, was also systematic.

Performance information appropriately considered

The Commission has delegated website management and evaluation to SES officers, who report back to the Commission regularly reports. ANAO stated, in its discussion paper:

A broad range of performance information was monitored and was appropriate for the objectives of the services audited. Monitoring of the effectiveness of public relations and media campaigns through "watches" was considered by the ANAO to demonstrate that web statistics can be useful to management for more than simply monitoring activity on the website.

CSIRO Response:

CSIRO supports the recommendations of the ANAO audit report and are in final stages of the redevelopment of our unified web project (CSIROLive). This project has been underway since 2002 and is due for initial release mid 2004. The Business Plan supporting CSIROLive reflects the importance of monitoring and evaluation and in particular the inclusion of user input and testing during all stages of development. The audit process has assisted us in fine-tuning our strategies for development of CSIROLive. We feel confident that we will deliver a web presence which is relevant to its users and which supports CSIRO's position as Australia's premier scientific research enterprise with global reach.

HIC response:

HIC agrees with all five recommendations of the report. HIC is committed to the effective and efficient delivery of online services to accord with the objectives o the e-government framework Better Services, Better Government. Consistent with this commitment, HIC has progressed a number of recommendations since the time the audit was conducted.

NOIE Response:

NOIE believes that the proposed report will be valuable in focussing agencies' attention on the need for a strategic approach to service delivery and, in particular, the Internet and emerging electronic service delivery channels.

Evaluation is a key component of the strategic management of any initiative and e-government is no exception. Measuring e-government initiatives against standard criteria enables progress towards goals and targets to be evaluated; achievements and potential barriers to be identified; and an understanding of the impacts and benefits to be gained. Sharing these results facilitates learning, development of best practice and opportunities for benchmarking.

The E-government Benefits Study was commissioned by NOIE in 2002 not just to gauge progress to date, but to extract the lessons from past experience and to pilot appropriate tools to help in establishing the value proposition for future online programs and e-government. The benefits study included the development of Demand Assessment Methodologies (DAM) and Value Assessment Methodologies (VAM). These methodologies will provide a consistent approach for Australian Government agencies to develop transparent and auditable assessments of demand and value propositions for online programs. These propositions underpin the business case. They can assist in substantiating the viability of the initiative, in justifying resource investment and in demonstrating transparency and accountability. These are key objectives of the Better Services Better Government strategy.

The demand and value assessment methodologies are being piloted, with a view to refining the tools for public release early in 2004.

NOIE noted that most agencies were in the process of ensuring consistency across their websites and portals. It suggested a new recommendation:

That agencies develop governance and management arrangements for their websites and portals to ensure consistency of standards, design and presentation of content across the agency.

Index

Australian Childhood Immunisation Register 7, 16, 42, 43 Australian Jobsearch 52 Australian JobSearch 15, 41 Australian Securities and Investments Commission ASIC 7, 14, 34, 37 Australian Taxation Office 7, 14, 34, 38 Better Practice Guide 13, 33, 53 Better Services, Better Government, 29, 82 Commonwealth Scientific and Industrial Research Organisation CSIRO 7, 14, 34, 39 CSIRO Enquiries 15, 35, 40 Demand Assessment Methodologies **DAM 83**

Department of Employment and Workplace Relations 7, 8, 14, 34, 41 e-Envoy 8, 30, 33

e-tax, 15, 38, 51, 66, 67, 77

EXAD 7, 15, 38, 66, 68

FIDO News 15, 38, 68

Government Online 13, 28, 29, 35

Health Insurance Commission 7, 14, 34, 42

National Indigenous Cadetship Project 7, 8, 15, 42, 52

National Office for the Information Economy 7, 14, 28, 29, 34

PBS Online 15, 45, 68, 70

Sentinel Hotspots 15, 40, 71, 72, 74

UK Government 8, 30, 31

Value Assessment Methodology

VAM 7,30

Value Measuring Methodology 7, 32

web statistics 18, 20, 24, 49, 54, 55, 56, 60, 61, 63, 68, 74, 82

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Audit Report No.10 Performance Audit Australian Defence Force Recruiting Contract Department of Defence

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Audit Report No.5 Business Support Process Audit The Senate Order for Departmental and Agency Contracts (Autumn 2003)

Audit Report No.4 Performance Audit Management of the Extension Option Review—Plasma Fractionation Agreement Department of Health and Ageing

Audit Report No.3 Business Support Process Audit Management of Risk and Insurance Audit Report No.2 Audit Activity Audit Activity Report: January to June 2003 Summary of Outcomes

Audit Report No.1 Performance Audit Administration of Three Key Components of the Agriculture—Advancing Australia (AAA) Package Department of Agriculture, Fisheries and Forestry—Australia Centrelink Australian Taxation Office

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