

## E-government in Australia

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Over the last decade, Australian governments at all levels have been planning and implementing broad policies for the application and use of information and communication technologies (ICTs) by the general public and the business community. Central to these plans has been the role of the government in guiding the development of the infrastructure, initiating and/or funding projects, and coordinating strategies across agency and sectoral boundaries and interests. Equally important has been the role of government agencies in leading the use of ICTs for improving their own information management and for delivering services. This leadership role has been one of the key strategies of e-government development in Australia. That development has followed a steady, although somewhat fragmented, path to a point where it is consistently ranked very highly against other countries on international indices of e-government development. The path is fragmented because, as will emerge from the outline of the progress of e-government in Australia, there have been a number of public sector agencies involved, with changing functions and responsibilities for policy planning, implementation, and monitoring.

One constant has been the objective of making government “an exemplar in the use of ICT to improve citizen engagement, efficiency, and effectiveness of service delivery.”<sup>1</sup> The three broad goals of e-government reflected in this statement are present in the major ICT policies of all tiers of government in Australia,<sup>2</sup> that is, to improve the efficiency of information management practices within and across government agencies and jurisdictions; to deliver fast, timely, and appropriate information and services electronically for business and the wider community; and to allow greater opportunities for citizen interaction with government and government processes progressing from more access to full participation in government or e-democracy. To date, most emphasis has been on the first two goals, although more attention is now being paid to the third.<sup>3</sup>

This chapter includes a brief outline of some important historical developments; an overview of current e-government approaches, policies, and achievements; and coverage of future developments. The focus is on the policies and strategies of the Australian federal government, although information and examples will also be provided from state and local governments as appropriate. To help in understanding the political and social context for policymaking in the information and communications area, the chapter unfolds with some general background information on Australia.

## CHALLENGES FOR E-GOVERNMENT

Australia's three-tier (federal, state, and local) system of government creates a major challenge as, at each level, there are separate but complementary functions and responsibilities, and inevitably there are crossovers. Within the same level of government there are territorial issues related to responsibilities across agencies and competing priorities. For ICT planning generally, cooperation and coordination are essential to avoid duplication, the incompatibility of systems, and wasted resources. Australian governments, like those around the world, are following a "whole-of-government approach" to electronic government described by the federal government as creating "seamless, responsive and citizen-focused government for the benefit of all Australians" and "broader and faster access to integrated, flexible and more customized services."<sup>4</sup>

There are additional challenges for online service delivery arising from Australia's geography and vast distances with some areas sparsely populated and others with high population concentrations.<sup>5</sup> Politically, if governments in Australia do not provide for "the bush" as well as the cities, they face an electoral backlash. There have been cost and technical accessibility issues for rural and remote areas. Although the Australian population is relatively homogeneous, within the wider community there are socially and economically disadvantaged groups with differing needs for information and other services and differing levels of ability in accessing those services. These include indigenous citizens, older people, and those with disabilities. Australia is a multicultural country, so there are also language and ethnic differences to be addressed in information and service provision.

Although, overall, there is a high take-up rate of new technology generally and the Internet in particular, there has been less take-up by individuals according to a range of socioeconomic indicators (e.g., those related to indigenous Australians; those who are older, unemployed, and looking to join the labor force; those on low income; and those with less education or with poor English skills). Australians living and working in regional and remote areas also have less access to the Internet.<sup>6</sup>

## DEVELOPMENTS IN E-GOVERNMENT

In 1993, the then Labor government under Prime Minister Paul Keating established an expert group to investigate and report on the development and use of broadband technology across all spheres of domestic and economic life in Australia. The government's vision as presented in the 1994 report *Networking Australia's Future*<sup>7</sup> recommended a national broadband strategy based on three key elements: education and community access, industry development, and the role of government. As well as establishing the necessary regulatory environment, coordinating policies across all sectors, and improving efficiency through better information management, government agencies would lead in using the network for service delivery to demonstrate "the benefits of the new communications services to the private sector and the wider community."<sup>8</sup>

The major push toward e-government began three years later with the change to the more conservative coalition government that is still in power. In 1997, Prime Minister John Howard's industry policy statement, *Investing For Growth*,<sup>9</sup> committed the federal government to:

- delivering all appropriate services electronically on the Internet by 2001;
- establishing a government information center as a main point of access to information about government services; and, in consultation with the states, developing a “single window access” to government information and services in Australia;
- establishing electronic payment as the normal means for commonwealth payments by 2000; and
- establishing a government-wide intranet for secure online communication.

There was now a greater focus on building an information economy through fostering electronic commerce, with the government leading by example in the development of online service provision. There was also recognition that this should be seen clearly as a “transformative” process for the public sector agencies responsible for providing information and services.

Also in 1997, the National Office of the Information Economy (NOIE) was established as a separate government agency to implement and coordinate the federal government’s online and Internet policies and to develop strategies for reducing the “digital divide.” NOIE’s first task was to develop the government’s overall ICT policy, *A Strategic Framework for the Information Economy: Identifying Priorities for Action*, which was subsequently released in December 1998.<sup>10</sup> In this policy, the government presented its vision and guiding principles and outlined ten key strategic priorities and related action areas for building Australia’s information economy. One of these priorities was to “implement a world class model for delivery of all appropriate government services online” by “providing as many affordable, equitable and accessible government services as is practical online.”<sup>11</sup> Key action areas associated with this priority were to:

- continue with a whole-of-government approach;
- ensure consistency, cost effectiveness, interoperability, and transparency within government;
- work toward cross-jurisdictional agreement on minimum standards;
- facilitate seamless and integrated electronic service delivery; and
- develop information management standards for the digitization of public records, publications, and archives.

NOIE was within the portfolio of the minister for communications, information technology and the arts. However, there was a division of responsibility as a second agency, the Office of Government Information Technology (OGIT) in the Department of Finance and Administration (DOFA), was responsible for coordinating the use of technology by the government to ensure high-quality services and consistency, cost effectiveness, and interoperative systems. In 1988, OGIT developed the first single federal government entry point, [www.fed.gov.au](http://www.fed.gov.au) (now [www.australia.gov.au](http://www.australia.gov.au)).<sup>12</sup>

In 1999, the Australian National Audit Office (ANAO) undertook a survey of government agencies<sup>13</sup> and concluded that the majority were likely to meet the 2001 commitment for delivering services online, although ANAO noted that there was no clear definition of “appropriate” services. This determination was left to the agencies, and for the most part they favored client-service information and support, procurement

and payment services, public relations and advertising, and general services. The ANAO identified four stages for progressive achievement of online delivery and grouped agencies accordingly. The stages were:

- having a “presence” where the agency puts information on a Web site and allows downloading;
- providing for some basic interaction (e.g., submitting queries and e-mailing forms); and
- allowing completed transactions to be performed.

The final stage of transformation involves the complete integration of the service and enables online users to move seamlessly from agency to agency. By 2001, only 2 percent were expected to be at the last stage, although more than half of the agencies would have an established Web presence.

ANAO’s survey also found that there were some impediments that agencies needed to address. These included current legislative restrictions on electronic formats, legal liabilities relating to information on Web sites, the shortage of IT skills, and issues of data security and privacy, particularly problems in using the public key infrastructure (PKI) to encrypt, decrypt, and verify data. The survey also suggested that agencies review costs and benefits of keeping both electronic and traditional services and reassess the way in which they performed their functions for online delivery.

In April 2000 the federal government released its more detailed e-government strategy, *Government Online*,<sup>14</sup> which set out eight priorities to be implemented and monitored through the Office of Government Online (OGO), an agency within the Department of Communications, Information Technology and the Arts (DCITA). Priorities included assisting agencies to take full advantage of opportunities provided by the Internet to deliver high-quality, low-cost, easy-to-use, and accessible services; putting government businesses online; enhancing online services for regional Australia; and facilitating the development of cross-agency services. The premise was that users should be able to find the information and services they needed without having to understand the structure of government. The OGO was given the responsibility for monitoring progress and documenting best practice, including compliance with the Online Information Service Obligations (OISOs; [www.agimo.gov.au/information/oiso](http://www.agimo.gov.au/information/oiso)), which mandated a minimum set of information that agencies must provide on Web sites and required agencies to use metadata developed for the Australian Government Locator Service (AGLS; [www.naa.gov.au/recordkeeping/gov\\_online/agls/summary.html](http://www.naa.gov.au/recordkeeping/gov_online/agls/summary.html)).

Also in 2000, the government released policies on specific aspects of e-government. One was the *Customer Focussed Portals Framework*, which was intended to simplify access to government information and provide the “platform for integrated service delivery.”<sup>15</sup> It brought together a number of Web sites (e.g., HealthInsite, [www.healthinsite.gov.au/](http://www.healthinsite.gov.au/), and the Business Entry Point, [www.business.gov.au/Business + Entry + Point/](http://www.business.gov.au/Business+Entry+Point/)) and allowed searching by subject area as well as for specific government agencies and services. Another procedural policy was the Commonwealth Electronic Procurement Implementation Strategy ([www.agimo.gov.au/publications/2000/04/eproc\\_strategy](http://www.agimo.gov.au/publications/2000/04/eproc_strategy)), which was developed to facilitate the way in which the government did business with its suppliers.

The *Better Services, Better Government* strategy, released in November 2002,<sup>16</sup> marked the next stage in progress toward e-government from the initial focus on putting government information and services online to developing a more “comprehensive and integrated” system for information service delivery and administration. The title of the strategy reflects the government’s view that “better services” equals “better government.” The focus was primarily on the transformation of internal processes and with achieving and demonstrating “tangible returns” from ICT investment (e.g., cost reductions through increased efficiency and improved service delivery to customers as well as continuing the emphasis on a whole-of-government approach to counter separate planning by individual agencies and to ensure better access to government services and information).<sup>17</sup> To assist with this objective, the *Interoperability Technical Framework for the Australian Government*,<sup>18</sup> released in 2003, sets technical standards for Australian government agencies to allow them to communicate and exchange information.

Since 2002, the Information Management Strategy Committee (IMSC; [www.imsc.gov.au](http://www.imsc.gov.au)), which was established following a recommendation by the Management Advisory Committee’s report *Australian Government Use of Information and Communication Technology*,<sup>19</sup> undertook the broad coordinating role for e-government. This high-level committee, made up of the heads of major departments and agencies, facilitates whole-of-government and multiagency approaches to ICT investment, governance, and management. This means changing organizational cultures, encouraging agencies to work across boundaries and across jurisdictions through data sharing and interoperability of systems, using common metadata and following common Web design and other technical protocols, and transforming internal processes to lower transaction costs and operate more efficiently. One approach is to encourage the development of clusters for information sharing on relevant social and economic indicators (e.g., health, education, and trade) and environmental indicators (e.g., climate).<sup>20</sup> The IMSC provides specific guidance and best-practice models on these matters to public sector agencies. A Chief Information Officer Committee reports to the IMSC on issues related to architecture, standards, and shared services.

A revised strategic framework, *Australia’s Strategic Framework for the Information Economy 2004–2006: Opportunities and Challenges for the Information Age*, was released in 2004. It streamlined the broad priorities of the 1998 policy from sixteen to four:<sup>21</sup>

1. to ensure that all Australians have the capabilities, networks, and tools to participate in the information economy;
2. to ensure the security and interoperability of Australia’s information infrastructure and support confidence in digital services;
3. to develop Australia’s innovation system as a platform for productivity growth and industry transformation;
4. to raise Australian public sector productivity, collaboration, and accessibility through the effective use of information, knowledge, and ICT.

A range of supporting strategies was also identified; these address the key challenges of equity of access, privacy, and security; cross-agency and cross-sector collaboration; and so on. Better governance was again emphasized, as was the need to develop partnerships with the private sector. All of these issues are integral to the further development of e-government and e-commerce.

By 2004, Australia, in the government's view,<sup>22</sup> was now one of the world's leading information economies overall and a role model of best practice for e-government. Strategies put in place first through the implementation of *Government Online*,<sup>23</sup> and later through *Better Services, Better Government*,<sup>24</sup> continued to be implemented. A range of issues still had to be addressed; examples include increasing the spread of ICTs and skills development across the community and industry to reduce economic, social, and geographic barriers to full participation; security and interoperability issues particularly related to authentication, privacy, and consumer protection to promote confidence in online transactions; fostering collaborations across government, community, and business sectors; and improvements in public service productivity and efficiency. The focus remained on better information management and the provision of more efficient e-services, as well as establishing the legal and technological environment for e-commerce within the national and global context. In early 2004, the federal government decided on a major change in the governance framework for e-government activities in order to achieve these goals.

#### MANAGEMENT OF E-GOVERNMENT

In March 2004 the federal government announced that NOIE would cease to operate as a separate agency and its functions and responsibilities related to broad policy, research, and programs would be transferred to an Office for the Information Economy (OIE; [www.dcita.gov.au/ie](http://www.dcita.gov.au/ie)) to be established within the Department of Communications, Information Technology and the Arts. A separate agency, the Australian Government Information Management Office (AGIMO; [www.agimo.gov.au](http://www.agimo.gov.au)), would also be established under the minister for communications, information technology and the arts to focus on promoting and coordinating the use of ICTs for delivering Australian government policies, programs, and services and maintaining the government's leadership role.<sup>25</sup> The rationale for this change was to allow the AGIMO to concentrate on gaining benefits from the use of ICTs for the delivery of Australian government programs and services while the new Office for the Information Economy handled the broader policy and research functions. Subsequently in October 2004 it was announced that the AGIMO would be incorporated within the Department of Finance and Administration.<sup>26</sup> This was a return to the earlier division of responsibilities for e-government between separate government departments (DCITA and DOFA) and a recognition that e-government is now a well-established area of government administration.

Overall responsibility for coordination of federal e-government activities remains with the IMSC, and a ministerial forum, the Online Council, has representatives from the states as well as the federal government. The council considers policies and procedures for services involving multiple agencies and across jurisdictions, and it is currently implementing a series of initiatives under its Integrated Service Delivery Framework.<sup>27</sup> More broadly, two other agencies, the Australian National Audit Office and the Management Advisory Committee (MAC), also monitor progress and issue reports from time to time. (Findings from their reports are referred to later in the chapter.)

At the state/territory level, as would be expected, developments and governance arrangements have followed a similar path with each government having a main ICT policy and a central agency to implement strategies, including those for e-government,

and to monitor progress. In New South Wales (NSW), for example, the government released its *Information Management and Technology Blueprint* and *Connect NSW* reports in 1997.<sup>28</sup> The Government Chief Information Office (previously the Office of Information and Communications Technology) within the Department of Commerce ([www.oit.nsw.gov.au/](http://www.oit.nsw.gov.au/)) manages e-government. In Victoria, the current policy is contained in *Connecting Victoria*,<sup>29</sup> released in 1999 and managed by Multimedia Victoria ([www.mmv.vic.gov.au/](http://www.mmv.vic.gov.au/)). In Western Australia, the Office of E-government administers the *E-government Strategy for the Western Australian Public Sector*.<sup>30</sup>

## MEASURING ACHIEVEMENTS

As outlined below, the focus of the federal government has been primarily on collecting data and measuring performance and progress against key indicators. Both the 1998 Strategic Framework<sup>31</sup> and the Government Online<sup>32</sup> strategy included policies on monitoring progress toward specific objectives. NOIE delivered three progress reports on achievements related to the broad Strategic Framework priorities.<sup>33</sup> For e-government activities, under the Online Reporting Framework developed by NOIE, agencies were required to report twice yearly to the Office of Government Online on activities such as cross-agency integration of services, compliance with procedural requirements, and outcomes for the intended beneficiaries of online initiatives.<sup>34</sup>

NOIE also commissioned the *E-government Benefits Study*<sup>35</sup> in 2003, which investigated the demand for and benefits of e-government for both the government and the user. The study found there was a strong demand particularly for preliminary information, which typically was followed up through more traditional channels. Benefits to the government that were identified included cost reduction and greater efficiency, whereas the benefits to users included improvements in finding information, in service quality, and in their ability to conduct business and make decisions. The study identified a number of barriers to the development of e-government, including the need for higher take-up rates for the Internet, improved design and navigation for Web sites, and greater security and privacy. It also found a need for better mechanisms to track online service delivery and its value for citizens. In the final phase, the return on investment from implementing online services was examined in order to determine a benchmark for agencies when they planned new services. A number of case studies were developed as part of this study to provide examples for agencies.

In the Better Services, Better Government<sup>36</sup> strategy, the emphasis was also on assessing the costs and benefits of online service delivery and measuring how agencies were doing in terms of meeting the broad e-government agenda. There were regular review mechanisms for assessing progress on key performance indicators, and NOIE was in the process of developing appropriate evaluation frameworks and benchmarks.<sup>37</sup> Under the current governance framework, the AGIMO is now responsible for reporting on developments in e-government, and it does so through its annual report.<sup>38</sup> AGIMO's specific responsibility is for reporting on "[s]trategic advice, activities and representation relating to the application of new technologies to government administration, information and services."<sup>39</sup> Other aspects of progress under the Strategic Framework 2004–2006 are reported by the Office for the Information Economy (OIE), for example, in the National Information Economy Index.<sup>40</sup>

As mentioned earlier, the ANAO has an important role in monitoring government investment and processes for the use of ICTs and has developed *Internet Delivery Decisions: A Government Program Manager's Guide*<sup>41</sup> to assist agencies. The ANAO has undertaken a number of evaluations, the latest for the period 2004/2005, in which it examined how agencies are measuring the efficiency and effectiveness of services delivered through the Internet.<sup>42</sup> Measuring Internet take-up, levels of accessibility, and tangible returns on ICT investment was an important objective of the Better Services, Better Government strategy. ANAO concluded after its latest evaluation that overall, although there had been improvements in some aspects (e.g., Web site management), agencies did not have adequate systems in place to assess whether their use of the Internet to deliver services and programs was efficient and effective either for users or for the government in the form of tangible returns on investment.

Australia has performed well on a number of international surveys on e-government, which measure e-government developments against a range of indicators.<sup>43</sup> The *United Nations Global E-Readiness Report 2004*<sup>44</sup> reports performance on a series of measures. On the "Web measure index," which measures progress against a Web presence model that covers emerging, enhanced, interactive, transactional, and networked stages, Australia ranks eighth, down from third in 2003.<sup>45</sup> On the "global e-government readiness" measure, which is a composite measure based on the Web measure index, an assessment of past spending on telecommunications, and levels of education and literacy, Australia is ranked sixth (from third in 2003).<sup>46</sup> This change in Australia's ranking is primarily reflective of the greatly improved performance of Denmark and Korea. Australia ranks eighth (same as in 2003) on the UN's "e-participation index,"<sup>47</sup> which measures governments' use of ICTs to engage citizens more in consultation than decision making. It assumes the existence of e-participation at a rather rudimentary level.

In the 2004 Accenture survey, Australia was rated fourth (with several other countries) on an e-government maturity index.<sup>48</sup> Accenture, an international management consulting and technology services company, noted that there was a lack of integration across government agencies although there were high levels of service breadth. Concern was expressed at the lack of a central e-government action plan due to the federated approach adopted by the federal government whereby each agency develops its own plan and approach. Accenture praised the valuable leadership role played by NOIE, particularly through the Better Services, Better Government strategy and the *E-government Benefits Study*,<sup>49</sup> which emphasized greater efficiency and a return on investment. Accenture also conducted a survey of Australian citizens, which showed that they are mostly using government Web sites to look for information (75 percent), rather than for conducting transactions (15 percent); 10 percent said that they used it for both equally.<sup>50</sup>

#### PROGRESS TOWARD ACHIEVING E-GOVERNMENT GOALS

In relation to the broad goal of better information management, it is difficult to assess whether the federal government's changes to governance over the last ten years have increased efficiency and effectiveness, particularly from the perspective of those seeking



to access and use government information and services. The establishment of the National Office of the Information Economy in 1997 was certainly a key factor in putting in place the legal and regulatory framework necessary for the provision of online information and services and in providing leadership across a very large and diverse range of functions. The governance framework now in place is clearer, with key functions split between the Australian Government Information Management Office and the Office for the Information Economy. The role of the Information Management Strategy Committee is to facilitate a big picture or whole-of-government approach. The AGIMO sees itself as supporting the work of the IMSC by "identifying and progressing solutions to whole-of-government issues." In its latest annual report, AGIMO claimed increased collaboration between agencies and the development of more integrated services as an indication that progress was being made.<sup>51</sup> For example, it reported on the implementation of the Technology Interoperability Framework ([www.agimo.gov.au/publications/2003/08/framework](http://www.agimo.gov.au/publications/2003/08/framework)), the release of a draft paper for an Australian Government Authentication Framework ([www.agimo.gov.au/infrastructure/authentication](http://www.agimo.gov.au/infrastructure/authentication)), and the rollout of the FedLink encryption system ([www.fedlink.gov.au](http://www.fedlink.gov.au)) for increasing the security of communications among agencies.<sup>52</sup> Activities more relevant to the digital divide (e.g., Internet access and use) are reported by DCITA in its *Information Economy Index and Current State of Play*.<sup>53</sup>

Projects being implemented under the National Service Improvement Framework<sup>54</sup> that cross jurisdictions include a pilot program with Centrelink and local governments in Western Australia and Queensland. This project provides Centrelink's Customer Confirmation Service to the participant local governments, thereby delivering a more efficient and seamless service to their customers by providing real-time advice on customers' eligibility for a concession, with the customers' consent. The aim of the TIGERS (Trials of Innovative Government Electronic Regional Services) Program in Tasmania is to develop integrated services involving multiple agencies and multiple jurisdictions. A number of pilot projects were implemented, including an online student bus pass application system (<https://eform.dier.tas.gov.au/sbpoaf/>) with online eligibility validation provided by Centrelink and Fishonline, a service for recreational fishers ([www.fishonline.tas.gov.au/](http://www.fishonline.tas.gov.au/)).<sup>55</sup>

This seamless, whole-of-government approach is also exemplified by the development of single-access portals that allow for searching by subject as well as by specific functions and agencies. Examples include Multiservice Express, now Victoria Online Portal ([www.vic.gov.au/index.jsp](http://www.vic.gov.au/index.jsp)), and the federal government's intergovernmental portal ([www.australia.gov.au](http://www.australia.gov.au)). The "look and feel" throughout the latter site is not consistent, and individual portals are also being developed around customer groupings (e.g., seniors and indigenous people) and subjects or topics (e.g., environment and employment). This system of portals upon portals is likely to be somewhat confusing to users. It is intended that the site be further developed to allow full search and retrieval capabilities across all levels of government and all government sites, as opposed to the current functionality, which merely points to the portal for each level of government.

Cross-agency examples that have internal efficiencies as well as a user focus as their aim include Jobsearch ([www.jobsearch.gov.au/](http://www.jobsearch.gov.au/)), which is a product of the Department of Employment and Workplace Relations. It provides job seekers and their intermediaries with a suite of online employment services and involves cooperation between several federal government agencies and businesses for current job notifications. The e-tax

program developed by the Australian Taxation Office (<http://ato.gov.au/individuals/>) is a much-touted example of effective user-centered product and service design in response to individual taxpayer feedback on the complexity of the TaxPack (the instruction booklet produced by the ATO to assist individuals to complete their own tax returns) as well as an example of increased internal efficiency. According to the ATO, internal efficiencies achieved include lower customer inquiry rates and increased accuracy of income tax returns, which in turn lower the error-correction rate and reduce TaxPack printing requirements.<sup>56</sup> (Raelene Vivian details the collaborative design processes used by the ATO.<sup>57</sup>)

In order to ensure that people with disabilities and people using older equipment or assistive technology can use Web sites, the federal government requires its Web sites to follow the World Wide Web Consortium's Web Accessibility Standards.<sup>58</sup> Priority 1 ("single" A) level appears to be mandated, although the wording is ambiguous, that is, "all websites were to follow the W3C guidelines to a sufficient extent that they pass recognized tests of accessibility."<sup>59</sup> AGIMO's *Access and Equity Issues for Websites*<sup>60</sup> is also concerned with making federal government Web sites accessible to people from diverse cultures as well as to those whose first language is not English. Examples of Web sites providing high levels of access include the Australian Human Rights and Equal Opportunity Commission ([www.hreoc.gov.au/](http://www.hreoc.gov.au/)) and Centrelink ([www.centrelink.gov.au/](http://www.centrelink.gov.au/)).

The extent to which federal government Web sites generally meet these guidelines is another matter. There have been some independent evaluations of government Web sites, and these have not been complimentary of the sites' user friendliness in general and their accessibility in particular, although the situation is constantly improving.<sup>61</sup> One study by the Hiser Group,<sup>62</sup> in 2002, focused on the user experience of government portal sites, comparing cross-agency portal sites within a single tier of local, state, and federal government (i.e., the earlier versions of the federal government portal, [fed.gov.au](http://fed.gov.au) and [vic.gov.au](http://vic.gov.au)) with portals that provide access to multiple tiers of government. The study findings indicate that the new-generation portals are repeating many of the mistakes of the earlier portals. Examples of these mistakes include categorization of information that requires knowledge of the structure and functions of government, a lack of a common look and feel across government sites, insufficient location cues, and lack of cross-linking to related information across government Web sites.

Sue Burgess and Jan Houghton,<sup>63</sup> who evaluated a number of NSW government Web sites, found a lack of clarity as to the purpose and audience of a site as one of several common factors making government sites frustrating and difficult for users. Other factors included inadequacies in online searching and help options, and a lack of provision for access by those with disabilities or with lower levels of technology or with older browsers. There were minimal information and services available in languages other than English, a major shortcoming in a multicultural country like Australia. According to Andrew Arch and Brian Hardy,<sup>64</sup> the current Australian approach of specifying minimum requirements but asking for higher levels of conformance has not delivered accessibility that is sufficient to meet the needs of e-government. This is despite the case of *Maguire v. Sydney Organising Committee for the Olympic Games* (SOCOG) in 2000, in which SOCOG was successfully taken to court for its failure to provide an accessible site. This example provides a clear indication that the Australian Disability Discrimination Act 1992 also applies to online services and publications.<sup>65</sup> A particular

concern with the provision of government services online is to ensure that every stage in the delivery chain is accessible.

Other accessibility issues relate to access to the Internet itself. While Australia is ranked high on the UN's "e-readiness" index, there are still significant areas and groups within the Australian population that have little or no access to the Internet. This indicates that many Australians do not participate in the information economy and are unable to access and use government information and services on the Internet. As Anni Dugdale et al. note,<sup>66</sup> many of those with low Internet access or use are those who receive significant government support. In other words, they constitute an important target group if access to electronic government services is to be increased, and they also constitute an important target group to reach for consultation on service improvements and policy developments. Access to computers and the Internet via community access centers and public libraries is one means of improving access, as are programs aimed at improving skill and confidence in using the Internet; see, for example, the federal government's Community Connectivity programs ([www.dcita.gov.au/ie/community\\_connectivity](http://www.dcita.gov.au/ie/community_connectivity)) and the Victorian government's Public Internet Access Program ([www.egaps.vicnet.net.au/](http://www.egaps.vicnet.net.au/)). The National Communications Fund is aimed at using ICTs to improve the delivery of government services (e.g., health and education, particularly in rural and remote areas); see, for example, Network WA ([www.egov.dpc.wa.gov.au/index.cfm?fuseaction=projects.network](http://www.egov.dpc.wa.gov.au/index.cfm?fuseaction=projects.network)).

#### PROGRESS TOWARD ACHIEVING E-DEMOCRACY

It is apparent from the outline of e-government developments in Australia, that there has been less emphasis on the third theme of the broad government vision, that is, for greater citizen interaction with government and involvement in the processes of government (e.g., online consultations, involvement in policymaking, and petitioning government). All four stages of electronic government expressed in the model developed by the Australian National Audit Office<sup>67</sup> (referred to earlier) equate to the "managerial" ideal type of Andrew Chadwick and Christopher May,<sup>68</sup> where the concern is primarily with improving efficiency (backroom administration) and service delivery.

In the revised *Strategic Framework* published in 2004, the federal government, under its fourth priority, refers to citizen interaction with the processes of government as a guiding principle. It implies that this priority will be achieved through improved service delivery and the creation of "efficient links with customers."<sup>69</sup> In the *Better Services, Better Government* strategy, this goal had received some attention; for example, one aim is "to enhance closer citizen engagement" in policy formulation and processes.<sup>70</sup> However, citizen engagement occupies only half of one page in the twenty-five-page document, and whereas there are very detailed proposals for improvements to internal processes and technologies, the section dealing with closer citizen engagement merely explains the term and refers generally to the existence of consultation practices used by federal agencies with their stakeholders, including some use of online consultation. State governments have moved more rapidly on this front, as discussed further in the following section.

This concern with community engagement on the part of the federal government is a reflection of what Meredith Edwards<sup>71</sup> sees as the changing role of government to

that of an enabler or facilitator of services that are delivered (outsourced) by third parties. It is also seen as government's response to increased cynicism toward government by citizens. Governance (i.e., how an organization conducts itself and the processes and structures used to achieve its goals) has become more of an issue. This includes those outside government who deliver and use services becoming involved in the development and monitoring of policy and programs.

The federal government's view on community engagement is more fully articulated in the Management Advisory Committee report *Connecting Government: Whole of Government Responses to Australia's Priority Challenges*.<sup>72</sup> It places strong emphasis on the importance in a democracy of maintaining two-way communication between the government and various external groups and individuals, and the report acknowledges the need to engage with citizens to improve design, responsiveness, and quality of policies and programs. One of its chapters is devoted to engagement with groups and individuals outside the public service where more than one level of government is involved.<sup>73</sup> There is, however, little or no focus on the use of information technology to foster the actual engagement process. *Connecting Government* also identified the importance of public servants developing increasingly sophisticated professional skills and techniques to manage this interaction.<sup>74</sup>

The 2004 "State of the Service" agency survey conducted by the Public Service Commission included a new question that explored the extent to which agencies are conducting formal consultations on program delivery and the development of government policy. The results indicated that there is much more consultation by agencies related to program delivery than to policy development and that the consultation is primarily with industry stakeholders and nongovernment organizations and much less frequently with members of the public. The forms of consultation were not specified, but it is clear from the text that few involved the use of ICTs and that all were within contexts defined by the government as opposed to by citizens.<sup>75</sup>

This thread has also been picked up by AGIMO in its *Better Practice Checklist: Online Policy Consultation*, which was developed with the assistance of the WA Office of E-Government and which draws on the consultation guidelines of the United Kingdom and the Organisation for Economic Co-operation and Development (OECD).<sup>76</sup> AGIMO also provides federal government examples of better practice in policy consultation using information technology ([www.agimo.gov.au/practice/delivery/examples/consultation](http://www.agimo.gov.au/practice/delivery/examples/consultation)). None of the examples provided showed the use of online discussion or engagement. The technology was being used primarily to provide access to government documents and the resultant submissions from individuals and groups (e.g., Department of Defence community consultation, see [www.defence.gov.au/consultation2/index.htm](http://www.defence.gov.au/consultation2/index.htm)). The citizen-engagement theme has been further explored through a conference and series of papers initiated by NOIE and jointly published by AGIMO/Institute of Public Administration, ACT Division under the title *Future Challenges for E-government*.<sup>77</sup>

Examples of the use of information technology to facilitate citizen interaction with governments at the state government level include the Queensland government's three-year pilot e-democracy program, which is designed to test the use of the Internet in opening up democratic processes and enhancing the community's access to and participation in decision making. Among the initiatives being trialed are e-petitions, Internet broadcast of Parliament, and online community consultations.<sup>78</sup> The practical difficulties of engaging in online community dialogue and consultation and its impact on the

work of public servants is illustrated by Kerrie Oakes<sup>79</sup> in her discussion of the day-to-day issues arising out of the operation of the Generate youth Web site, which is part of the community consultation initiative. This site ([www.generate.qld.gov.au](http://www.generate.qld.gov.au)) provides a forum for active two-way engagement between young people and the Queensland government. The issues identified by Oakes include skill development for public servants to enable them to moderate online discussions and summarize contributions; integration of offline and online activities; content management and record keeping processes; the relative roles and responsibilities of public servants and politicians; and the necessity for the provision of timely feedback on the progress of the matter to participants.

The e-government efforts of the Victorian state government have widened to include a concern for governance and ways to encourage citizen initiatives and interaction with government. In 1999, this government set up a Democracy Online initiative, including a reference to a parliamentary committee (now the Subcommittee on Electronic Democracy), which has produced a substantial discussion paper on electronic democracy<sup>80</sup> and conducted public hearings ([www.victorianedemocracy.info/](http://www.victorianedemocracy.info/)). The focus is on netcasting of parliamentary proceedings; online interactive and collaborative approaches to policy discussion, including citizen e-mail and online forums; and other technology solutions to promote access and participation.

In New South Wales early support by government for the development of networked communities, especially for those isolated by distance or social dislocation, evolved into the Community Builders site ([www.communitybuilders.nsw.gov.au/](http://www.communitybuilders.nsw.gov.au/)), which has assisted those working in community development by providing an avenue for sharing knowledge and resources. The emphasis here has been on building capacity in civil society by using the forums on the community builders' Web site to facilitate communication between and among communities rather than between community and government.

Online voting was introduced for the first time at state or territory level in the 2001 Australian Capital Territory election when some seventeen thousand voters availed themselves of the opportunity. The subsequent election in 2004 also provided this option. Voting was via personal computers located at the prepolling voting centers and at several of the polling booths on election day. A report on the 2001 experience from the ACT Electoral Commission indicated few problems with its use and a range of advantages (e.g., eliminating the need for manual counting of electronic votes, reducing the number of informal votes, allowing blind and sight-impaired people to vote without assistance and in secret through use of headphones and recorded voice instructions, and providing on-screen voting instructions in twelve different languages).<sup>81</sup>

At the local government level in Australia, there has been some interest shown in developing ICT-based options for engaging with local residents. Brisbane City Council's Your City Your Say (YCYS; <http://ycys.brisbane.qld.gov.au/>) provides an extended example of community consultation on issues of broad strategic importance. It draws on several thousand members of the community who have registered on the site. Topics range widely and have included sustainability, water sprinkler systems, and homelessness. The YCYS consultation process also includes provision of relevant information on the issues under discussion.

Beginning in February 2005, Warringah (in Sydney, NSW) Council's fortnightly

meetings have been broadcast live over the Internet ([www.warringah.nsw.gov.au](http://www.warringah.nsw.gov.au)). Local residents can see the administrator<sup>82</sup> and council staff responding to questions from the public forum at the beginning of each council meeting, as well as dealing with council reports and decisions arising.

## LOOKING TO THE FUTURE

With the incorporation of AGIMO into the Department of Finance and Administration, there will be an increased emphasis on improving internal agency efficiency through the use of information technology and on agencies more carefully assessing the value and benefits of proposed online services. The number of transactional services is likely to increase with greater attention being paid to ease of use and accessibility issues. Because most users of government Web sites currently use them primarily to look for information rather than to conduct a transaction, significant progress here will be difficult. The push to implement cross-agency and cross-sector programs requiring interoperability between systems and the transformation of business processes is likely to continue, but the complexities involved mean that progress will be slower. What is not so clear is what emphasis, despite the rhetoric, will be placed on initiatives at the federal government level to increase the level of community engagement. There are few initiatives specifically addressing this objective. It is at state and local government levels that there is likely to be greater use of information technologies to engage the community.

## CONCLUSION

Australia is clearly an e-government leader when measured against global benchmarks, although the rate of increase is slowing as more complex e-government activities and problems are addressed. With Australia's federated structure of government, vertical integration of electronic government remains one of the key challenges if seamless government is to be achieved. The goal of increased citizen interaction with government may also conflict with the provision of the most efficient online services, and digital-divide issues will continue to be an issue in a large country with a small population.

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