PART ONE

2

Government services

2.1   As described by the Department of Finance and Deregulation (DOFD), 'ICT is a critical enabler of government and its administration, governance and delivery of services to citizens and business.'[1]

2.2   Broadband is an essential component of governments' use of ICT. Through its ubiquity, the NBN will enable government to deliver an increasing number of services online to an increasing number of people. Through its speed, the NBN will enable government to advance its online service offering by incorporating technologies that improve citizens' experiences.

2.3   This chapter examines the NBN's impact on government services and operations, but does not include the range of government services covered in other chapters (such as health, education and infrastructure management). The chapter will look at current e-government services in Australia and then look at how e-government services might be used in the future to improve efficiency and citizen engagement.

Current services

2.4   In 2009, a survey conducted by the Australian Government Information Management Office (AGIMO) indicated that the internet is now the preferred method for Australians to make contact with government. The

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1   DOFD, *Submission 166*, p. [cover page].

survey also indicated that more people would interact with government online if the usability of services was improved.[2]

2.5   Supporting these findings, one of the key observations from the United Nation's (UN) *2010 e-Government Survey* was that:

> On-demand access to information, services and social networks on the Internet through a personal computer is no longer considered cutting-edge in developed regions but a norm that many people take for granted.[3]

2.6   The development and implementation of e-government services has important benefits, as noted by the Broadband Commission for Digital Development in its recent report *Broadband: A Platform for Progress*:

> Easy access to information about government services and activities helps to improve accountability and the quality of the services that an administration provides … In addition, by making it easier and cheaper to access information, broadband connectivity is becoming a key facilitator of good governance.[4]

2.7   Australia has made good progress to date in e-government services, as evidenced by our high ratings in the UN survey cited above. DOFD's submission notes that the survey ranks Australia:

> … first in Connected Services, second in its e-participation index, fifth in online service development, and eighth in the world on its e-government development index overall.[5]

2.8   Despite this achievement, the Australian Information Industry Association (AIIA) suggested there is still significant room for improvement:

> First generation e-government—the use of ICTs to improve access to public services, improve and increase transaction flows and interactions with citizens—has enabled government agencies to deliver better services and achieve a range of efficiencies. But despite over 15 years of intense investment and effort, with few exceptions, the way in which government services are delivered has not fundamentally changed. Citizens are still filling in forms, attending offices, receiving letters in the mail, compiling

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2   AGIMO, *Interacting with Government: Australian's use and satisfaction with e-government services*, December 2009, p. 5.

3   United Nations, *e-Government Survey 2010*, p. 3.

4   Broadband Commission for Digital Development, *Broadband: A Platform for Progress*, June 2011, p. 34.

5   DOFD, *Submission 166*, p. [1].

> documents to prove who they are, liaising with multiple agencies, presenting the same information multiple times …[6]

2.9   The DBCDE submission expressed similar sentiments:

> … it remains the case that there are many transactions that still require the client to visit a government office. For the elderly, the disabled, families with young children and those living in regional and remote Australia, the need to travel to a shopfront can be difficult and inconvenient.[7]

2.10   As an example of this limitation, Centrelink—the most commonly cited service delivery agency during the inquiry—still conducts 62 per cent (69.5 million) of its transactions on-site.[8]

2.11   DOFD observed that many online services are less developed than they could be because of the poor broadband services on offer in many parts of Australia—particularly in regional and rural areas.[9]

2.12   This issue was described as the 'lowest common denominator approach' by Adult Learning Australia. While the example relates to education services, it applies equally to other government services:

> Currently, around the country … there are a range of technologies that are used to provide learning experiences and enhance social inclusion. However, each one is stymied by some participants having access to reasonably fast broadband and others having limited or no access … excellent learning and engagement tools are not used or are used at the level that matches the internet speed of the user with the worst connection.[10]

Services under development and future services

2.13   The Government's *National Digital Economy Strategy* sets a goal that four in five Australians will choose to engage with government online by 2020.[11]

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6   AIIA, *Submission 184*, p. 4.
7   DBCDE, *Submission 215*, p. 8.
8   NICTA, *Submission 198*, p. 8.
9   DOFD, *Submission 166*, p. 2.
10   Adult Learning Australia, *Submission 163*, p. [1].
11   Australian Government, *National Digital Economy Strategy*, May 2011, p. 24.

2.14   However, as the UN explains in its 2010 e-Government Survey, 'e-services cannot substitute for traditional methods if citizens do not have ready access to the requisite infrastructure.'[12]

2.15   The submission of the Department of Human Services (DHS) outlines that the saturation of broadband across the community (usually referred to as ubiquity) is a significant factor for the delivery of e-government services.[13] The NBN will enable agencies, for the first time, to plan their online services knowing that all of their clients potentially have access to a high-quality level of broadband service.[14]

2.16   During the course of the inquiry the Committee heard about a range of new e-government services—some that are being developed and others that are simply envisaged as a concept. In most cases the services would require broadband speeds far beyond what is available to the majority of Australians with current infrastructure, but at speeds that will be available when the NBN is rolled out.

2.17   Unquestionably, the speed and ubiquity offered by the NBN presents significant opportunities for governments, but also significant challenges, as summarised by the AIIA:

> With demands for improved transparency and accountability of public administration, increased pressure for community involvement in decision-making processes, and heightened citizen expectations of service quality and convenience, nothing short of transformational change is required. The NBN provides exactly what is needed to achieve this. Not only does it provide the underpinning infrastructure but also a platform for the convergence of technologies, applications and innovation necessary to change existing service paradigms.[15]

2.18   Responding to a question at a public hearing about what is needed to take advantage of the opportunities, Ms Suzanne Roche, a Director of the AIIA, stated:

> To me it is culture. Centrelink is a very good example of this …
> You have had 70 years of history of an organisation asking people
> to come in, stand in a queue, fill in a form, go home, bring in
> documentation … After 70 years, getting people to change how

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12   United Nations, *e-Government Survey 2010*, p. 45.
13   DHS, *Submission 186*, p. 7.
14   DOFD, *Submission 166*, p. 2.
15   AIIA, *Submission 184*, p. 5.

they do something—and that is from the provider side as well as from the consumer side—is difficult … We know that you cannot change behaviour overnight, but it is fundamentally what does need to change.[16]

2.19 As noted in the DOFD submission, AGIMO is attempting to lead this cultural change through strategic documents such as the *Declaration of Open Government*, the *Cloud Computing Strategic Direction Paper*, and the *Whole-of-Government Tele-working Policy*.[17]

Efficiency in service delivery

2.20 The key reason for pursuing e-government service delivery is efficiency— whether it is achieved through less travelling and waiting time for citizens, less need for manual processing of data by government employees, or less need for agencies to maintain expensive service delivery shopfronts. These and other opportunities for efficiency in service delivery will be enhanced by the NBN.

2.21 DHS has overarching policy responsibility for the Federal Government's key service delivery agencies, including Medicare and Centrelink, and highlighted a range of areas where service delivery efficiencies could be achieved:

- The use of real-time interactions and web 2.0 technologies for interactions with customers including video-conferencing, chat rooms and collaborative online workspaces.
- Enhanced ability to share and integrate information from across government and service providers. Customers would be able to utilise high bandwidth functionality including the ability to scan documents and present electronic evidence to support their interactions with the portfolio in real time. This can reduce the need for customers to attend offices in person which has benefits for particular customer and client cohorts.
- Authenticated information could be passed between agencies in real time, with customer consent, obviating the need for customers to physically provide certain types of validating documents.
- Active content that changes in real time based on the actions of the user allowing them to manage their own information, make claims, and identify and self assess eligibility. This includes tailoring the content to suit users' preferences, including their

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16 *Committee Hansard*, Canberra, 27 May 2011, p. 7.

17 DOFD, *Submission 166*, pp. 1–2.

> preferred language, what services are included and how they like to share their information.

- Ability for substantial mobile applications to be enabled by NBN such as mobile phone applications and other ubiquitous computing.
- Increased broadband coverage can be leveraged to provide more targeted services, particularly for people who are geographically isolated. This includes any planned growth in new suburban areas where broadband infrastructure is built into the suburban landscape.[18]

2.22   While this list focuses on the opportunities for DHS agencies, the Committee considers that it applies equally across all levels of government.

2.23   Throughout the inquiry, video-based technologies were commonly cited as the key drivers of future use of bandwidth, and this is also true in relation to the future of government service delivery. CSIRO, using Centrelink as an example, highlighted what could be possible:

> A network that provides broadband communications will make the provision of tele-presence service between government offices, homes and other public locations … possible and readily available …
>
> Customers visiting a Centrelink office could talk with the expert for each specific customer case, anywhere in the country. Whilst this does not remove the need for the presence of the Centrelink officer, it does remove the need for the officer or the customer to travel, possibly substantial distances. It also allows people with different skills and experience to be connected to customers with particular needs anywhere in the network. The customer experience will be similar to having the customer and the service officer involved in a private face-to-face consultation. The involvement of an expert, regardless of the location, in solving the customer's problem will result in faster and better service quality.[19]

2.24   Continuing this theme, Regional Development Australia (RDA) Townsville and North West Queensland (among many other regional organisations) cited the potential importance of video-conferencing applications for isolated communities:

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18   DHS, *Submission 186*, p. 9.
19   CSIRO, *Submission 171*, p. 6.

> High speed broadband will ensure greater equity across
> Australia's communities in regard to access to government
> services. Federal, state and local governments and communities
> will be able to communicate more readily using online services
> including web-based video-conferences, improving the reach,
> efficiency and productivity outcomes for governments and
> customers alike.[20]

2.25   The Department of Immigration and Citizenship (DIAC) described how
        greater availability of video-conferencing could assist its unique services:

> Implementation of the NBN could enable professional (DIAC)
> services to be delivered from home. An example of this is the
> provision of interpreting services via video-conferencing in early
> NBN release sites across Australia. The high data speeds and
> reliability available through the NBN will enable interpreter
> services to be provided by video-conference, enabling body
> language and other nuances of behaviour to maximise
> comprehension and reduce miscommunication.[21]

2.26   The AIIA explained how government services might be delivered using
        even less conventional technologies:

> Augmented reality tools (a live, direct or indirect view of a
> physical, real world environment augmented by computer
> generated sensory input such as sound or graphics) open the
> potential for new and innovative ways to deliver training, provide
> customer intervention and support emergency and outreach
> activities remotely. Without an NBN infrastructure the scope of
> application and benefits that can be achieved using these smart
> applications will be limited.[22]

Efficiency in government operations

2.27   As well as driving efficiency in service delivery, the Committee considers
        that the NBN will drive efficiency in the day-to-day internal operations of
        government agencies, including through expanded utilisation of video-
        conferencing, cloud computing and tele-working.

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20 RDA Townsville and North West Queensland, *Submission 202*, p. 2.
21 DIAC, *Submission 214*, p. 2.
22 AIIA, *Submission 184*, p. 8.

Video-conferencing

2.28   The most obvious area is through more extensive and effective use of video-conferencing.[23] Across federal, state and local governments, there is undoubtedly an enormous amount of money and time spent travelling for meetings. As the NBN is rolled out, and as the cost of the necessary equipment becomes less prohibitive, the viability of high-quality video-conferencing as a substitute for travel and face-to-face meetings will be enhanced.

2.29   CSIRO explained some of the characteristics and technological requirements of modern video-conferencing systems:

> The term 'tele-presence' is used to describe high definition, high frame rate, low latency, immersive video-conferencing facilities. The experience for the user is similar to being in the same room as a person or group at the other end of the communication link. Such services typically cannot operate over ADSL links as they require high bit rate symmetric networks of the order of tens of Mbit/s … Early tele-presence systems were expensive, costing over $300 000 per installation. Prices have fallen rapidly in recent years and we now see commoditisation of this type of technology …[24]

Cloud computing

2.30   Cloud computing is another area where there is scope to improve efficiency in the operations of government. DOFD explained that cloud computing involves the delivery of 'technology as a service across broadband connections'. This includes the delivery of standard applications such as email and word processing, as well as data storage. DOFD suggested that 'cloud computing provides opportunities to access technology at lower cost and more flexibly than traditional computing methods'.[25]

2.31   National ICT Australia (NICTA) proposed that there are two avenues of benefit for governments through cloud computing:

> The first is in enabling government agencies to operate their IT architectures more efficiently internally and, because cloud approaches make it easier to share data and standardised services,

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23   See, for example, Department of Regional Australia, *Submission 169,* p. 11.

24   CSIRO, *Submission 171*, pp. 5–6.

25   DOFD, *Submission 166*, p. 4.

support inter-agency integration. The second avenue lies in the ability to scale services to the public more efficiently and effectively, again using standardised services on scalable cloud architectures.[26]

2.32 The submission went on to comment on the necessary supporting infrastructure: 'For cloud computing to work well there must be a reliable high-speed broadband connection, such as the NBN, between the user and the cloud facility.'[27]

2.33 The Australian Local Government Association (ALGA) noted potential benefits from shared cloud computing platforms, and highlighted that more than 40 Victorian Councils have joined to such a platform to improve their collective ability to deliver services. The submission argued that:

> The outcomes of a national broadband network are key enablers that will allow councils to transform the way services are delivered to their communities. Without such capability each council is constrained to building and maintaining its own communication and technology infrastructure that significantly diminishes the opportunity to deliver reform and innovation through collaboration.[28]

2.34 The Municipal Association of Victoria also focussed on the shared services initiative, and commented on the network capacity required to run these and other cloud services for local government in the future. Box 2.1 contains more information on the Association's plans.

2.35 While acknowledging the potential of the NBN for local government in areas such as cloud computing, ALGA cautioned that smaller councils in particular would need assistance to realise the potential.[29] The Committee considers that the Federal Government's recent announcement of the Digital Local Government Program should provide some assistance in this regard. The Program will provide grants of up to $375 000 to councils in each of the first 40 NBN release sites '… to develop solutions that can be adopted by other councils and rolled out across the country as the NBN rolls out.'[30]

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26 NICTA, *Submission 198*, p. 9.
27 NICTA, *Submission 198*, p. 9.
28 ALGA, *Submission 139*, pp. 5–6.
29 ALGA, *Submission 139*, p. 5–6.
30 The Hon. Senator Stephen Conroy, Minister Broadband, Communications, and the Digital Economy, 'Local Government to Benefit from the NBN', *Media Release*, 22 June 2011.

> **Box 2.1   Shared services for Victorian local governments**
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> The Municipal Association of Victoria said that more than half of its 79 councils have collaborated in developing a shared service project and that 12 of these are now ready to implement the first stage of a shared ICT service that is planned to go live on 1 July 2011. The Association noted that:
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> *The outcomes of a national broadband network are key enablers that will allow councils to transform the way services are delivered to their communities. Without such capability each council is constrained to building and maintaining its own communication and technology infrastructure that significantly diminishes the opportunity to deliver reform and innovation through collaboration.*
>
> However, to fulfil its role as an enabler of shared services (with particular benefit for rural councils), the Association emphasised that the NBN must have sufficient capacity to run council business in the 'cloud':
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> *The intention is to place all business applications in the cloud and manage it as a virtual service. This includes all the telephony and video-conferencing services. Whilst 100 to 1000 Mbit/s may sound excessive today we believe that as the paradigm for local government business changes we will soon see applications and services that are dependent upon these high speed networks. We believe it would be short-sighted to fix the network at the 10 Mbit/s limit of today's business need or to migrate a larger proportion of the service to a wireless solution.*
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> Source: Municipal Association of Victoria, *Submission 135,* p. 7.

2.36   Cloud computing is discussed in more detail in Chapter 6 on economic development, and is also discussed in Chapter 5 in relation to the environmental benefits of green data storage.

Tele-working

2.37   Another area where government at all levels will benefit from the NBN is the increased capacity for employees to work from home or other remote locations. Tele-working, or tele-commuting, involves 'employees utilising technology to work from locations other than the traditional workplace'.[31] The NBN is expected to promote increased levels of tele-working by 'improving digital sharing of information and resources' and enabling 'cheaper and easier access to video-conferencing, higher speed internet and other associated IT infrastructure'.[32]

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31   Infrastructure Australia, *Submission 10*, p. 4
32   Department of Infrastructure and Transport (DIT), *Submission 213*, p. [6].

2.38   A 2010 study by Access Economics (commissioned by DBCDE) found that growth in tele-working will provide a range of benefits, including:

- Time and cost savings from travel avoided;

- Office expenses avoided;

- Recruitment and retention gains;

- Increased workforce participation; and

- Infrastructure savings.[33]

2.39   The *National Digital Economy Strategy* identifies an increase in tele-working as one of the key outcomes from the NBN.[34] It is therefore important that the Government demonstrate leadership by promoting tele-working opportunities within its own workforce. The Committee notes that an online 'Tele-work Forum' was hosted by the Government on 3 August 2011 in order to 'showcase Australian business and government agencies that are using tele-work to improve their performance'.[35]

2.40   The 'remote' opportunities for government agencies through NBN also extend to locating more staff in regional areas. This was highlighted by the Community and Public Sector Union (CPSU):

> The NBN creates the opportunity for a greater physical presence for federal government agencies outside of major capital cities. This has the potential to allow for dispersed networks of federal government 'back of office functions' such as claims processing and phone based client service work that can be used to support government shop front services in smaller population centres where the volume of client traffic may have made a physical office presence previously unviable. The location of some government services in regional centres would also provide significant economic benefit to those areas.[36]

2.41   NICTA expressed similar sentiments:

> An additional benefit from pervasive broadband is that gives the government greater scope to locate government employees outside Australia's major cities. This benefits the regions [by]

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33   Access Economics, *Impacts of Teleworking under the NBN,* July 2010, p. i.

34   Australian Government, *National Digital Economy Strategy*, May 2011, p. 24.

35   DBCDE, 'Telework' <http://www.dbcde.gov.au/digital_economy/programs_and_initiatives/telework> viewed 8 August 2011.

36   CPSU, *Submission 115*, p. 2.

> bringing high-value jobs to the region, the government by
> lowering the cost base, and alleviates the congestion and over-
> crowding that plague our cities.[37]

2.42   Tele-working is discussed in several other areas of this report, including
        Chapter 5 which looks at the environmental benefits, Chapter 6 which
        looks at productivity benefits for businesses, and Chapter 8 which looks at
        the work–life balance issues.

Other areas

2.43   The Committee was advised of less obvious areas within each unique
        portfolio that will also benefit from the NBN's capacity. For example, the
        Department of Defence's submission identified 'networked capability' and
        'network centric warfare' as key components of the Defence Force's future
        strategy. The submission concluded:

> Defence's expectation is that the NBN will provide the underlying
> carriage for the future Defence network, with the capacity to scale
> to the ADF's needs, and to reach Defence locations around
> Australia.[38]

2.44   Another example, identified by the Department of Innovation, Industry,
        Science and Research (DIISR), is Australia's Earth Observation System
        (EOS) capabilities. The Department advised that there are 'at least ninety-
        two government programs, totalling $1.3 billion in annual expenditure,
        dependent on EOS'. This includes key activities such as the National
        Carbon Accounting System, National Weather Forecasting Services and
        reporting obligations under the UN Framework Convention on Climate
        Change. The Department concluded:

> The infrastructure and communication systems needed to collect
> and transfer EOS data require modernisation and rationalisation to
> cope with the increases in data volumes that are expected over the
> next decade. The NBN will play an important role in providing
> this needed boost to capability.[39]

Gov 2.0

2.45   'Gov 2.0' is a term that is used to describe governments' use of 'Web 2.0'
        technologies that rely upon user-generated content. According to

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37   NICTA, *Submission 198*, p. 8.
38   Department of Defence, *Submission 230*, p. 6.
39   DIISR, *Submission 219*, p. 6.

Government 2.0 Taskforce—commissioned in mid-2009 by then Minister for Finance and Deregulation, the Hon Lindsay Tanner—Web 2.0 'encompasses the way in which the internet has become a platform for the distribution of vast quantities of data'. The Taskforce also highlight that:

> The tools of Web 2.0 include blogs, wikis and social networking platforms. These tools enable communities of interest to develop rapidly to find people with local knowledge or technical expertise to build understanding of issues and solve problems as they emerge.[40]

2.46   In its December 2009 report, the Taskforce recommended that:

> Public agencies and public servants should engage more using the tools and capabilities of 'collaborative web' or Web 2.0. Forming or joining existing online communities of interest around issues of relevance to government policy, service delivery and regulation will help public agencies and their officers become more informed, responsive, innovative and citizen centric.[41]

2.47   The Government responded favourably to the majority of the report's recommendations in May 2010, and in July 2010 released the *Declaration of Open Government*, outlining a commitment to utilising Web 2.0 technologies and making public sector information more accessible.[42]

2.48   Government agencies appear to have made some good progress in their adoption of Gov 2.0 technologies. Around 50 agencies have Facebook pages and around 100 have Twitter accounts, while several agencies are hosting and participating in online blogs and posting material on YouTube.[43] Box 2.2 contains a sample of a recent Twitter feed set up by the Australian Bureau of Statistics (ABS) for the 2011 Census.

2.49   The Committee agrees that the NBN will play an important role in furthering the Gov 2.0 agenda. The ubiquitous coverage to be delivered by the NBN will enable more people to be engaged with government online through Web 2.0 technologies. The speed of the NBN will enable government agencies to include more bandwidth intensive material in their online engagement activities.

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40   Government 2.0 Taskforce, *Engage: Getting on with Government,* December 2009, p. xi.

41   Government 2.0 Taskforce, *Engage: Getting on with Government,* December 2009, p. iii.

42   DOFD, *Submission 166*, p. 3.

43   Computerworld, *Federal Government Embracing Gov 2.0,* 9 June 2011, <http://www.computerworld.com.au/article/389642/federal_government_embracing_gov_2_0/> viewed 28 June 2011.

2.50   Several inquiry participants commented on the benefits and potential of
        Gov 2.0. NICTA explained how government agencies have used social
        media applications to assist with emergency management:

> A powerful example … was the Queensland Police Service's use of
> Twitter and Facebook during the 2011 floods and Cyclone Yasi.
> The Queensland Police Service was able to distribute important
> information to a wide audience quickly and curb the propagation
> of rumours and false information.[44]

Box 2.2   Sample Twitter feed for the 2011 Census

Source: Twitter <http://twitter.com/#!/2011Census/> viewed 9 August 2011.

2.51   DIAC explained that the NBN and Gov 2.0 technologies will improve the
        capacity for public engagement on migration issues:

> Considering recent changes to the migration landscape, it is
> expected that the community will seek to engage with the
> department more often by accessing departmental information

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44   NICTA, *Submission 198*, p. 8.

regularly. The NBN—through wider access to social media tools and a faster internet—will support these interactions.[45]

2.52   The submission of the City of Geraldton-Greenough highlighted its '2029 and beyond' deliberative democracy program as an example of the potential of Gov 2.0. The program seeks views from citizens about the City's strategies and projects using online engagement tools, including a blog site that enables citizens to 'brainstorm' ideas for new projects. The submission noted that the NBN will assist the implementation of the program and help expand the services within the region.[46]

2.53   The AIIA commented on another aspect of Gov 2.0—the increase in government information being collected and made available online. The NBN is expected to improve the capacity to transmit and leverage government data:

> The Government invests heavily in collecting, analysing and transforming vast amounts of data, information and content. In a world where information is so highly valued, coupled with new technology tools that enable us to rapidly aggregate, manipulate, analyse and disseminate it, the NBN provides a means to leverage national information assets in ways that were never imagined possible. With access to high speed broadband for collecting, analysing and disseminating information, the NBN will enable the Government to use information analytics to gain better insights to business and social problems, make better decisions and create better outcomes …

> Making the data available in the public space means it can be mashed with external data sets to generate broader and whole of economy business innovation and community and national benefits.[47]

Committee conclusions

2.54   The Committee agrees with inquiry participants that the NBN will be a catalyst for change both in the way government services are delivered to citizens, and in the way government agencies conduct business more generally.

45   DIAC, *Submission 214*, p. 2.
46   City of Geraldton-Greenough, *Submission 147*, pp. 9–10.
47   AIIA, *Submission 184*, p. 6.

2.55   The Committee notes that there is already strong public demand for
        e-government services. Australia ranks highly in international comparison
        surveys of e-government services, suggesting that good work has been
        done so far in progressing the e-government agenda. But there is quite
        clearly a lot more that can be done. Traditional service models involving
        signing and posting documents or turning up at government offices are
        still very common. Ubiquitous and fast broadband has the potential to
        make citizens' interactions with government much more efficient.

2.56   The NBN can also facilitate efficiencies in the way government
        organisations undertake their day-to-day business (beyond service
        delivery). The Committee is confident that modern, high-quality
        video-conferencing systems will enable public servants and service
        delivery clients to travel less, providing time and cost savings as well as
        environmental benefits. This relates not only to interstate travel for
        meetings, but also to the ability of government employees to work from
        home. Adoption of cloud computing promises to deliver savings to
        governments by reducing capital spending on storage and applications.

2.57   Gov 2.0 applications can vastly improve the way governments provide
        information to, and engage with, the community. The Committee notes
        the work agencies have done in engaging with existing platforms
        (Facebook, Twitter etc.). These and other Web 2.0 technologies have a
        significant role to play in facilitating community engagement in
        government policy and decision-making processes.