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Development**  
*Australia*  
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28 November 2017

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***Re: The Digital Economy: Opening up the Conversation Draft Consultation Paper***

Please find attached our comments on the Australian Government's draft consultation paper *The Digital Economy: Opening up the Conversation*.

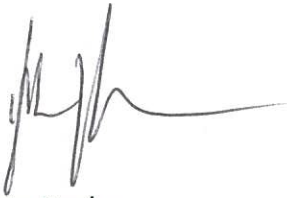
RDA NT is an incorporated not-for-profit community-based organisation that is concerned with building partnerships and ensuring that all governments and stakeholders collaborate in developing and strengthening regional communities. RDA NT is part of a nationwide network of 55 RDA Committees with membership comprising local individuals who have a good understanding of the economic, environmental and social issues and priorities in their respective regions. RDA NT considers telecommunications service delivery to be one of the key issues underpinning the NT's economic and social development.

Given the critical role that telecommunications plays in our region, RDA NT has been active in this space since 2014. We have been a member of the Broadband for the Bush Alliance (including Board membership) and supported the annual B4B Forum. We have also had input into the 2015 Regional Telecommunications Review, the Productivity Commission's Review of the TUSO and the Australian Government's Telecommunications Reform Package. We have also completed two significant telecommunications projects, the Digital Workplace Assessment Tool (DWAT) and the High Speed Technology Wireless Pilot.

Our comments are attached but broadly fall into two categories: comments on specific elements of the consultation paper and broader comments regarding the need for a series of underlying principles to guide the development of the strategy. We believe that the latter is necessary in order to mitigate the risk of perverse, unintended outcomes in both the short and medium-long term that will deepen the 'digital divide' for those living and working in remote and very remote parts of the Territory.

If you have any further queries please do not hesitate to contact Project Officer Robin Gregory on 0417 781 272 or by email [alice@rdant.com.au](mailto:alice@rdant.com.au).

Yours sincerely

A handwritten signature in black ink, appearing to read 'Kate Peake', with a long horizontal flourish extending to the right.

Kate Peake  
Chief Executive Officer



An Australian Government Initiative



## Comments on Australian Government's Draft Consultation Paper *The Digital Economy: Opening up the conversation*

### Digital Readiness and Infrastructure

The consultation paper notes that Australia's ranking on the World Economic Forum's Network Readiness Index continues to slip (p10). Clearly, we are falling behind many other developed nations despite the rollout of the NBN. Given that this Index measures our capacity to leverage ICT to improve competitiveness and wellbeing, an integral part of any Digital Economy Strategy must be to address these areas in which we are performing so poorly, namely affordability (fixed broadband internet tariffs in particular), as well as the business and innovation environment and specifically availability of venture capital and government procurement of advanced technology products, as well as mobile network coverage (% population).

For sectors such as agriculture and all industries in remote areas of Australia to be able to take advantage of new digital technologies, the issue of connectivity must be addressed. For example, we have received consistent feedback from our stakeholders that the Skymuster satellite packages are simply too expensive and subject to data caps and shaping, these issues effectively restrict the ability of the agricultural sector and others in remote areas to be able to use the IOT in ways that increase productivity.

The *Australia's Digital Pulse* report for 2017 notes the clear need for there to be greater investment in ICT-related R&D. Business investment in this field is a relatively low share of our GDP compared to other businesses in developed economies and Australia was ranked 8<sup>th</sup> out of 11 in an international comparison of OECD data regarding this measure (ACS and Deloitte 2017, p16). Consideration should be given to developing particular incentives to encourage greater business investment in this area. Currently the R&D tax incentive is restricted to R&D activities undertaken for the R&D entity; i.e. businesses cannot claim the tax incentive if they contribute to R&D activities which are not specifically carried out for them. Many SMEs (which comprise 97% of all businesses in Australia) do not have the capacity to invest in R&D unless that is their core business; expanding the eligible activities to include investment in ICT-related R&D undertaken by another organisation without a direct benefit to the investing business would potentially encourage greater investment by the business community generally. The incentive rate could be matched to the extent of investment in R&D activities as a proportion of that businesses' annual turnover. This would increase the pool of investment funds available for ICT-related R&D.

### Standards and Regulation

Under Standards and Regulation it is disappointing that the Paper makes no mention of the proposed Consumer Safeguards (CSG) Review, nor the Telecommunications Consumer Protection (TCP) Review. Any Strategy aiming to grow the digital economy should recognise that ensuring service obligations apply to data as well as voice services is critical. The increasing number of public complaints in this area should be a clear signal to Government that "market competition" alone is not a sufficient mechanism to ensure timely and effective responses to consumer's complaints (particularly in areas with a limited number of, or only one, service provider).

Development of the Strategy should take into account the Productivity Commission's Review of the TUSO and yet to be released Australian Government response, as well as the proposed Consumer Safeguards (CSG) & Telecommunications Consumer Protection (TCP) Reviews. Clearly, outcomes from these activities will impact upon the Territory's digital landscape. For example, if the Australian Government accepts the Commission's recommendation to scrap pay-phones, this has implications for very remote communities in the NT where a single Telstra pay-phone is the only form of communication available. Accordingly, we strongly urge the Government to ensure that the final Digital Economy Strategy takes into account, and responds to, the Commonwealth's response to the TUSO review as well as findings from the reviews of the CSG and TCP. This may mean that it is necessary to delay the timeline for completion of the Strategy but we believe it is far more important to ensure the Strategy has relevance beyond the highly populated metropolitan and inner regional areas of Australia.

### *Artificial Intelligence*

The moral, ethical and legal issues surrounding the development and use of AI are significant and beyond the capacity of this consultation process to adequately address. On page 14 the consultation paper treats AI in a simplistic manner and neglects to mention potential risks and other flow-on effects. It is not until page 16 that there is mention of these risks, but these have tended to be downplayed. Tellingly, none of the questions at the end of this section, nor elsewhere in the consultation paper, relate specifically to AI and associated issues. We urge the Government to develop clear policies around the use of AI, across all industries, including ethical protocols. This should be the first step prior to any regulatory (legislative) reform.

### *Data sharing and privacy*

Consumers and businesses need to have confidence around the Government's ability to safeguard data. Until Government can demonstrate that it can store data securely (including when that data storage is outsourced to third-parties) there will understandably be a reluctance to embrace advances in digital technology more fully that will not be solved simply by "community education and digital literacy" (p20 of the consultation paper). A recent survey by the University of Sydney (*Digital Rights in Australia*) found that most Australians are concerned about their digital privacy.

The claim that "research shows most people are comfortable with using digital channels to interact with federal government agencies and more than a third have said that it was most preferred, or one of their preferred, channels" is based on an unrepresentative sample. In the survey 7% of individuals didn't have internet access compared to 14% of the Australian population at the time the survey was undertaken (ABS Catalogue 8416.0). The majority of respondents (79%) had both internet and mobile access (DWA and JM Bruce 2015). Additionally, although data regarding Indigenous status was not recorded as part of the survey methodology, it is highly unlikely that ASTI people were sufficiently represented given the survey methodology. The move to shift all Government services on-line will only widen the existing digital divide between those who have internet access and those that do not, and unfairly disadvantage those who already suffer considerable disadvantage, particularly in remote and very remote areas (see also our comments under Digital Skills and Inclusion).

The paper cites findings from a Commonwealth Bank study that 80% of small and medium businesses are delaying the adoption of technology that could offer long-term benefits (p17), without providing any insights into why this might be case. The Bank's website indicates that among the reasons for the delay were that the benefits of adoption were not immediately realised, lack of knowledge/understanding of new technology and how it works, cost, and/or it was simply considered irrelevant or "too-hard". In addition to the Bank's study, there have been many other reports that have examined SME ICT take-up and the reasons why businesses delay (e.g. reports by Digital Business Insights, Sensis, the Australian Communications and Media Authority, CSIRO). It should also be noted that numerous submissions to the 2015 Regional Telecommunications Review clearly indicated that issues such as lack of infrastructure, mobile black spots, slow internet connections, service disruptions and drop outs, issues with wireless connectivity, limited choices of telecommunications packages and high prices were significant barriers for small businesses in regional and remote areas. Unless the Strategy specifically addresses the reasons why SMEs are reluctant to adopt technology, it is unlikely that take-up rates of new technology among SMEs will significantly increase, with flow-on economic effects.

### Digital Skills and Inclusion

The paper refers to the 2017 *Australian Digital Inclusion Index* and notes that there are still gaps in digital ability, basic skills and attitudes to technology. The Government should be aware that relying solely on the Australian Digital Inclusion Index to identify gaps is problematic as the Index does not include data from remote Indigenous communities and there are sample size issues associated with the NT dataset. The concerns and issues for these people are therefore not adequately identified by the Index; a key gap relates to connectivity and specifically accessibility and affordability. Any genuine attempts to close the digital divide must recognise these issues and identify practical steps to address them. Development of the Strategy should be underpinned by guiding principles that will ensure that the digital divide is not inadvertently widened (refer more specific comments below).

We note that the Government's "Be Connected" initiative is aimed to deliver resources specifically for those aged 50 and over who have minimal/no engagement with digital technology. We urge the Government to ensure that these resources include versions appropriate for older Indigenous people as well as other individuals for whom English is not their primary language, as well as the sight-impaired.

The final paragraph of the paper attempts to look at the "bigger picture" however we suggest that this is too timid; the potential is for changes that will profoundly restructure our entire society and culture. As such, we argue that this should provide an opportunity to explore potential future scenarios in order to identify both risks (and how these can be mitigated) and opportunities.

### Apparent lack of guiding principles

The consultation paper identifies three themes, but not any underlying principles to guide development of a Digital Economy Strategy.

At a minimum, the guiding principles for the development of a Digital Strategy should include flexibility, provision of choice, and minimising the risk of creating perverse (i.e. unintended) outcomes.



### *Flexibility*

The Strategy must recognise that a “one-size-fits-all” approach is not appropriate for the Territory’s unique geographic, demographic and economic circumstances, nor for Australia as a whole. The need for flexibility is supported by a review of the relevant literature, including case studies, as well as our own research undertaken as part of the Digital Workplace Assessment Tool (DWAT) project (see for example, Dyson 2004, Dyson and Brady 2009, Featherstone 2013, Iten 2014, p8; Kral 2010, Nicholls 2009, Radoll 2010, Rennie et al 2016, RDA NT 2016, Thomas et al 2017, pp.41-42).

The DWAT project specifically examined the digital capacity and capability of organisations across the NT in order to provide baseline data for meeting the challenges of a digital economy. Whilst some nationwide studies of Internet adoption and usage have included the NT, these have not produced longitudinal and spatial trends nor facilitated an in-depth consideration of drivers and barriers specific to the NT. Additionally, such studies have primarily focused on the business sector in metropolitan areas. Given that the vast majority of the NT consists of remote and very remote areas, these studies are limited in their applicability. As a result there are significant gaps in our knowledge and understanding of digital capacity and capability in the NT. The Digital Workplace Assessment Tool (DWAT) survey aimed to address this knowledge gap.

The key results of the DWAT study revealed that while there are some shared issues by workplaces across the Territory, there are also different needs and issues between sectors (government, business and not-for-profit) and in terms of remoteness (Outer Regional, Remote and Very Remote areas as defined by the ABS Remoteness Classification). For example:

- Highly significant differences emerged between respondents based on workplace location (remoteness) and the adequacy of Internet access. One of the most notable differences related to the adequacy of Internet services. Over 80% of respondents in Outer Regional areas said their level of Internet access enabled them to adequately utilise their workplace applications, compared with only 63% in very remote areas.
- Differences between workplaces in urban and non-urban locations regarding the use of applications to reduce travel were highly significant. Respondents who said they did not use applications to reduce their travel cited reasons such as lack of reliable connectivity (41.9%), no need or lack of applicability (23.2%) and slow service (speed) (9.3%). There were highly significant differences between workplaces responses according to their type of connectivity.
- There were no significant differences between workplaces based on location (remoteness) in relation to innovation, level of internal resources to manage the digital aspects of the business or development of strategies to increase their digital presence. Similarly there were no substantial differences between workplaces based on location regarding whether or not they undertook online training, digital training, or used the Internet as part of the recruitment process.

- Highly significant differences were observed between workplace types in relation to regular updating of online resources, and existence of policies and procedures for people working online. Government workplaces were more likely to use online training and have policies and procedures in place. This is not surprising given the resources available to this sector. What was surprising was that government workplaces were less likely to regularly update their online resources compared to respondents from business and NFP/community group workplaces. As previously mentioned, this may be because most ICT, media and marketing functions are managed at head office, rather than remote workplaces.
- There were also significant differences between workplace types regarding the extent to which they used the Internet for recruitment and relied on government websites for information. Respondents from government workplaces were more likely to use the Internet for recruitment (86.6%) compared to business respondents (61.5%). A higher proportion of government respondents relied on government websites for information (93.8%) compared to NFP/community groups (76.5%) and business respondents (72%).
- There were no substantial differences between workplace types regarding the use of mobile technologies and devices to access and transfer data, nor proportions that undertook online training, digital training, used technology to reduce operational costs, used applications such as web and videoconferencing to reduce travel, had the capacity to internally manage the digital aspects of the business, or the existence of a digital strategy. Regardless of workplace type or location, all workplaces performed poorly in terms of digital training (less than 50%) and having a strategy to increase their digital presence (less than 57%).
- For non-urban respondents digital capacity and capability appears to have been influenced primarily by connectivity type. This was particularly evident in relation to having adequate levels of access to the Internet to enable use of workplace applications, use of technology to reduce operational costs, and the ability to use applications such as web and videoconferencing to reduce travel. For example, while over 80% of respondents in outer regional areas said their level of Internet access enabled them to adequately utilise their workplace applications, this dropped to only 63% in very remote areas.

These examples have been provided to highlight the need to develop flexible policies and programs that can address diversity in digital capability and capacity across sectors and locations.

It should be noted that while the DWAT study was undertaken in 2014 we believe these findings remain relevant. Certainly our stakeholders' experiences with satellite remain largely unchanged, despite the introduction of nbn's Skymuster services.

Therefore workplaces in outer regional, remote and very remote areas of the NT face the following barriers to transformation, which should be addressed in any digital strategy for the Territory:

- inadequate access, speed and reliability provided by satellite connectivity;
- high cost (low affordability) of telecommunications, particularly mobile and satellite;
- lack of strategies to enhance the digital presence of workplaces; and
- lack of digital training programs designed and delivered to meet user needs and aspirations.

Note: The strategy should be underpinned by a perspective which views digital solutions (e.g. Telehealth) as complementary to existing practices, not as a substitution. Additionally, the strategy should also provide for further research to underpin policy and program development, including drivers and barriers for teleworking; drivers and barriers for cloud computing; the relationships between digital training, having a digital strategy, innovation, workplace size, and industry sector; and how digital literacy can be improved alongside improving basic literacy and numeracy skills.

#### *Provision of choice*

Stemming from the need for flexibility, is the need to ensure that the Strategy facilitates the provision of choice. The existing 'single solution' policy approach of the Australian government and the nbn which locks very remote respondents into a satellite solution for example, is clearly problematic. The DWAT survey results highlighted the inferior service that satellite provides and the need to explore alternative backhaul solutions. Many of these issues remain unresolved by the Skymuster service and it was this need that prompted the Northern RDA Alliance to develop a pilot project exploring alternative technologies to deliver high-speed internet.

It is important that the Digital Strategy does not lock users into particular service delivery models (e.g. the shared internet café-style model in remote communities) or move to a digital/on-line only mode of service delivery. Research by Rennie et al (2016, p182) demonstrated that the shared internet café/computer room model may not be the most suitable mechanism for providing equitable access in remote Indigenous communities, but equally fixed home internet was not necessarily always a suitable alternative. ICT arrangements need a high greater degree of flexibility to meet the needs of different user groups. Moving to a digital/on-line only environment will only further disadvantage those who do not have access to an internet connection and/or who lack the necessary digital (and literacy) skills to utilise on-line apps.

#### *Minimise risk of unintended consequences*

We believe that incorporating the principles of flexibility and provision of choice will substantially reduce the risk of perverse outcomes. For example, there is a very real likelihood that moving to a digital/on-line only environment for service delivery would disadvantage those in remote areas and perversely result in a widening of the digital divide. Similarly, locking people into particular technological solutions which are inferior to that which can be provided by terrestrial-based technology may serve to stifle business growth and innovation, particularly in sectors that will increasingly rely on automation (IoT), big data analytics, and ability to access other real-time data, such as agriculture and transport/logistics.

Affordability and quality of services is an issue for ICT consumers Australia-wide and even more so in areas where there is comparatively less choice of service provider. This is particularly the case outside of the major urban areas of the NT where a single Telco provider remains the dominant supplier of a broad range of telecommunications services and backhaul infrastructure. The Digital Strategy should ensure that Government initiatives do not inadvertently further entrench the issues of service monopolisation.



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