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Submission **14th October 2022**

5-year Productivity Inquiry: Australia’s data and digital dividend

Submission by the Australian Communications Consumer Action Network (ACCAN) to Productivity Commission

**About ACCAN**

The Australian Communications Consumer Action Network (ACCAN) is the peak body that represents all consumers on communications issues including telecommunications, broadband and emerging new services. ACCAN provides a strong unified voice to industry and government as consumers work towards communications services that are trusted, inclusive and available for all.

Consumers need ACCAN to promote better consumer protection outcomes ensuring speedy responses to complaints and issues. ACCAN aims to empower consumers so that they are well informed and can make good choices about products and services. As a peak body, ACCAN will represent the views of its broad and diverse membership base to policy makers, government and industry to get better outcomes for all communications consumers.

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# Executive Summary

ACCAN thanks the Productivity Commission for the opportunity to comment on its *5-year Productivity Inquiry: Australia’s data and digital dividend – Interim report* (the report)*.* The report acknowledges the benefits to productivity of increasing digitisation.

The report also explores common barriers to technology and digital adoption, including inadequate access to internet services, lack of skills, limited awareness and uncertainty about benefits, costs and legacy systems. ACCAN considers that an area which the report notably overlooks is accessibility for people with disability. We encourage the Productivity Commission to consider how the accessibility of digital technologies could be improved in order to boost digitisation and productivity.

In our response, we have focused on the following areas:

**Investing in regional digital infrastructure:** funding is needed to support reliable and affordable internet access across Australia. Investment needs to promote consumer choice and retail competition. Funding mechanisms need to be designed with robust transparency requirements, appropriate safeguards and based on demonstrated results to garner community support.

**Developing digital, data and cyber security skills:** we support greater investment in the development of digital, data and cyber security skills across the community.

**Balancing cyber security and growth:** we support prudent and efficient investment in cyber-security systems and processes. We encourage the Productivity Commission to examine opportunities to consolidate and strengthen existing cyber-security requirements.

**Supporting ethical use of technology and data:** the Australian Human Rights Commission report, *Human Rights and Technology,*[[1]](#footnote-2)provides a number of recommendations which would help to secure an innovative and safe digital future for Australia where the benefits of a national approach to the implementation of a framework would likely outweigh the costs.

**Coordinating the policy and regulatory environment:** ACCAN sees limited evidence of issues created due to a lack of coordinated policy and regulation. However, we see merit in greater coordination regarding policies to target digital exclusion as a more holistic approach is required. Any increased efforts and associated costs to coordinate policy and regulation should be proportionate to the benefit gained.

# Investing in regional digital infrastructure

ACCAN is a member of the Regional, Rural, Remote Communications Coalition (RRRCC), an alliance of organisations with the aim of improving connectivity in the bush; the goals of the RRRCC include:[[2]](#footnote-3)

1. Guaranteed access to voice and data services;
2. Equitable voice and data services that meet minimum standards and reliability;
3. Continue programs to expand mobile coverage;
4. Digital capacity building for regional, rural and remote Australia;
5. Affordable communications services for regional, rural and remote Australia.

Consumers in regional, rural and remote Australia continue to face challenges when accessing telecommunications services where they live and work. This is despite the significant investment in telecommunications infrastructure, through the Mobile Black Spot Program (MBSP), Regional Connectivity Program (RCP) and the completion and upgrades of the National Broadband Network (NBN).

The latest report by the Telecommunications Industry Ombudsmen (TIO)showed that complaints regarding poor mobile coverage went against the general trend of decreasing complaints, increasing by 6.1% from the previous year, and equating to 5.4% of the TIO’s total complaints.[[3]](#footnote-4) This echoes the increasing trend of feedback ACCAN has received from members and consumers regarding issues with availability of mobile coverage. The trend suggests that despite current levels of investment in telecommunications infrastructure, more is needed in the future.

Significant gaps in access to services and poor quality of service prevents regional consumers from realising the full potential of digital technology. As such, ACCAN supports the Productivity Commission exploring ways in which to boost investment in regional digital infrastructure.

## Better data would assist in linking investment to outcomes

Since the removal of questions on internet access from the census there has been reduced availability of granular data on where people are accessing the internet. That said, the ACMA has begun collecting data on how we use the internet,[[4]](#footnote-5) and a recent report by Deloitte Access Economics used this data to calculate the percentage of households without internet access by LGA. They found that households in Local Government Areas (LGAs) that are remote are 8 times more likely to have no internet access. If households are in a rural area, they are five times more likely to not have internet access and if households are in an LGA that has lower incomes, then they are twice as likely to not have internet access.[[5]](#footnote-6) This confirms that households on lower incomes and residents in remote and rural areas face higher levels of digital exclusion.

The data from the Deloitte report indicates where efforts to tackle the digital divide should be targeted. For example, in the LGAs of Belyuen, Northern Territory and Maralinga Tjarutja, South Australia as many as 87% and 76% of households could not access the internet respectively.

Whilst understanding the percentage of households that don’t have access to the internet is vital to identifying where those most at risk of digital exclusion live, ACCAN agrees with the report that good data should also be about quality and adequacy of connection. Additionally, there needs to be consideration of how people use and benefit from digital technologies. As such, data is required which explores all three levels of the digital divide (see Box 1), as described by Dulfer et al (2022).[[6]](#footnote-7)

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| Box 1. Three levels of the digital divide[[7]](#footnote-8)  **Level 1 data:** The first level looks at those who have access and those who do not, such as the report from Deloitte Access Economics. However, data at this level could mask a more complex reality and suggest that mobile-only users, as a group of internet users have the same level of access and therefore the same opportunities provided by internet accessed through desktops, laptops and fixed connections.  **Level 2 data:** Data on the second level digital divide examines digital and technical skills that people need to use devices and connections.  **Level 3 data:** Data on the third level conceptualises and investigates digital inequality based on who is able to benefit from their internet access and digital skill. |

The Australian Digital Inclusion Index (ADII) measures access, affordability and digital ability, at the level of LGAs.[[8]](#footnote-9) Unfortunately, some areas (such as the Northern Territory) have insufficient sample sizes, reducing the utility of the Index in supporting targeted policies. Extending digital inclusion reporting to include all LGAs is critical to supporting targeted policy.

## Improving transparency on how investment decisions are made

ACCAN agrees with the report that there is a need for improved transparency regarding how investments are made, and investment priorities are set. For example, ACCAN has previously expressed concern regarding the Federal Government’s Grant Guidelines for the RCP Round 2,[[9]](#footnote-10) in addition to the Peri-Urban Mobile Program (PUMP) Grant Guidelines.[[10]](#footnote-11)

Both programs grant guidelines provide opportunity for projects to be selected which may not have been the most highly ranked by merit criteria. The RCP Round 2 grant process considers whether the project supports a government priority without clearly defining what the government priority may be, in addition to the Department reserving the right to recommend funding a project which may be lower ranked against merit criteria.[[11]](#footnote-12) Stipulations such as this within grant guidelines adds uncertainty and reduces transparency from the grant process.

Clearly defined guidelines will reduce procedural uncertainty for the communities seeking funding. Furthermore, reasons for any decision regarding grants should be published to build community confidence that the funding is allocated on merit.

## A market-based mechanism for digital infrastructure

This section below has considered the following questions asked in the report:

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| **Recommendation direction and information request 3.1**  **Investing in regional digital infrastructure** |
| The Commission is considering a recommendation in its final report to improve access to low-cost, reliable, future-proofed internet services in regional and remote parts of Australia. To inform the development of this recommendation, we are seeking views and evidence on:   * Could a Universal Service Guarantee (USG) tender mechanism be designed to meet regional and remote connectivity requirements and support competitive bidding, and what would be appropriate settings for:   + the minimum service levels to be delivered and maximum prices to be charged by the successful provider   + the geographic regions that tenders are issued for, and how granular regional breakdowns should be   + contract specifications such as optimal length and payments structure? * What would be the benefits and costs of introducing such a market-based mechanism, compared to the current system of allocating government funds to multiple regional digital infrastructure programs? * If a USG tender mechanism were to be implemented, what kind of phasing or transitional arrangements would be required to effectively shift from the current system? |

A market-based mechanism for providing digital infrastructure may provide solutions more efficiently and at lower costs when compared to the current system. Any market based tender mechanism, needs to be designed to ensure that consumer expectations and needs are met. Accordingly, any progression to a market-based tender mechanism should require:

* projects to be delivered efficiently;
* services to meet appropriate reliability requirements;
* services to be affordable;
* consumer choice and retail competition;
* a technology neutral approach, with choice of technology to be based on ability to meet community needs; and
* robust transparency requirements.

### Projects to be delivered efficiently

The key strength of a tender mechanism is that it may encourage the delivery of solutions at a lower cost, by eliciting competitive bids from potential providers. However, this relies upon multiple providers bidding for a project area. In certain areas, such as those with low population density and/or low household incomes, there is greater likelihood that only one provider will be willing to tender. The report discusses how in this situation, the Government will enter into negotiations with the provider.

One of the key risks of the proposed mechanism is that negotiations between the Government and providers may not necessarily result in the delivery of services being achieved at the greatest value for money for communities. Mechanisms to guard against inefficient delivery of projects should be considered. This could include capital and operational costs expenditure reviews that involve benchmarking costs against international comparators for example. Expenditure reviews should be public to encourage accountability.

### Services to meet appropriate reliability requirements

ACCAN supports service standards being set at the wholesale level and passed through to consumers at the retail level. The current USG requires networks to be capable of reaching peak download speeds of 25 Mbps and peak upload speeds of 5 Mbps. Not only should network providers be able to consistently provide download and upload speeds of 25 Mbps and 5 Mbps respectively, service quality levels such as connection times, fault repair times and appointment keeping need to be included where applicable.[[12]](#footnote-13)

Minimum service levels should be reflective of those already set out in the Customer Service Guarantee (CSG) but extended to broadband services to ensure that as we progress from standard telephone services to internet protocol communications, consumer protections keep pace. Thus, timeframes for new connections and fault rectifications should allow Retail Service Providers (RSPs) to meet CSG timeframes.[[13]](#footnote-14) Where service standards are missed, the provider should be liable to pay the affected end user compensation, set in line with CSG amounts.

If funding is provided to build mobile networks, minimum requirements should be in place regarding how much time is provided by battery backups, particularly if the service area is remote or prone to natural disasters. Additionally, consideration should be given to how service providers will be incentivised to go above and beyond minimum service standards. For example, tender bids with higher service level agreements (SLAs) could be prioritised over those with lower SLAs. All service standards need to be supported by appropriate reporting requirements to promote accountability.

### Services to be affordable

Retail prices which are set too high discourages take up of the service. Maximum retail prices should be based on the efficient cost of providing the service. Additionally, maximum prices need to be set with consideration of policy objectives. For example, where the policy objective is to overcome digital exclusion in areas with a high proportion of low-income households the tender might not necessarily go to the lowest bidding service provider if there is another service provider that can offer the service at a lower retail price. Indeed, ACCAN’s No Australian Left Offline initiative is in recognition of the need for subsidies to be paid for broadband to be affordable for households on the lowest incomes.[[14]](#footnote-15) Consultation with local communities is necessary to understand what a feasible retail price point is. In some communities, the most appropriate solution may involve free public Wi-Fi access. Additionally, policy makers could consider funding a project if the provider allows for social tariffs, which target specific cohorts with more affordable services.

### Consumer choice and retail competition

As identified in the Report, there is a risk of embedding infrastructure monopolies through introducing a market-based mechanism given the high levels of investment already sunk by NBN Co and Telstra, which gives them an advantage over competitors. Specific market failures caused by monopoly power can be addressed through setting appropriate maximum prices and service standards as discussed above. Consumers can be further protected by encouraging retail competition. Projects where there is a guarantee of retail competition could be prioritised to prevent vertical monopolies from emerging.

ACCAN is aware of existing consumer confusion regarding which services are available to regional and rural consumers. We recommend that more consumer information regarding connections be provided to end users to support the transition to this mechanism. This could be achieved through the creation of an independent comparison tool that allows end users to look up the services available to them at their premise.

A technology neutral approach, with choice of technology to be based on ability to meet community needs

A flexible market-based tender mechanism can be tailored to specific community needs. It is important that a transition to this mechanism is carried out with the confidence of local communities. For example, consumers in remote and regional Australia are heavily reliant on fixed line telephone services and feel they cannot trust other technologies in an emergency.

ACCAN is aware of rural consumers who maintain their ADSL service due to the poor reliability of satellite internet services at their location. Thus, any solutions which might replace one service needs to have the same, or improved levels of service. New solutions need to be proven to work at appropriate levels of reliability for communities to gain trust and support for them.

Investing in new technologies, and demonstrating their functionality and reliability, prior to the removal of any legacy services is critical to building community support for new technologies. This is essential to establishing the social license to remove legacy services that no longer meet community needs.

This will require investing in new technology prior to the removal of any legacy services. That said, funding shouldn’t solely go to incumbent providers with traditional solutions if more innovative technologies can be proven to work. This would work to encourage greater competition amongst providers, ultimately driving more efficient outcomes.

### Robust transparency requirements

The market-based mechanism needs to be entirely transparent. The issues of transparency experienced with the current system could transpire in a market-based mechanism, due to unclear tender criteria and policy priorities or because of private negotiations with individual providers.

We consider that measures should be put in place so that communities are easily able to see why funds are being spent, how they are being spent, and what they can expect in return. Data collection and reporting requirements will work towards improving transparency. Data collection on service outcomes needs to be carried out uniformly across providers. Currently Mobile Network Operators (MNOs) measure mobile network coverage using differing assumptions. Service outcomes that are not measured in the same way nationally will make comparisons and evaluations of projects difficult. ACCAN considers that reporting requirements should include:

* Reliability metrics:
  + connection timeframes
  + fault repair timeframes
  + appointment keeping
  + service availability.
* Customer service metrics:
  + volume of complaints received and resolved
  + volume of complaints escalated to the TIO
  + first contact resolutions
  + average wait times by method of contact
  + time taken to get enquiry resolved.
* Financial hardship metrics:
  + number of disconnections
  + number of customers that re-enter financial hardship arrangements once successfully completing one set of arrangements
  + number of customers in credit management.
* Digital inclusion metrics:
  + Access, affordability and digital ability metrics, both before and during service delivery.

## Alternative approaches

We encourage the Commission to consider alternative approaches to improving connectivity in regional and rural areas. For example, the Rural Connectivity Group (RCP) in New Zealand, is a joint entity consisting of New Zealand’s 3 MNOs that builds, operates and maintains a 4G wireless network. [[15]](#footnote-16) The RCP builds infrastructure where it would have traditionally been uncommercial to do so.

The NSW Government is also exploring ways in which innovative sharing solutions can improve mobile connectivity.[[16]](#footnote-17) The MBSP Round 5A also provided funding to three trials for MNOs to provide shared mobile infrastructure including one trial for a neutral host network and two which utilise domestic roaming.[[17]](#footnote-18) As more funding is required to address isolated and remote connectivity issues, more innovative funding mechanisms will be required.

ACCAN considers that greater focus should be on the areas of greatest need; areas experiencing most digital exclusion. Many of the areas facing the greatest digital exclusion are also unlikely to have many competitive tender bids and are more likely to require innovative funding mechanisms in order to encourage infrastructure investment.

# Developing digital, data and cyber security skills

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| **Recommendation directions and information requests 3.3**  **Developing digital, data and cyber security skills** |
| As stakeholders have identified skills issues as a significant barrier to productivity growth, the Commission is considering a recommendation on improving the supply of digital, data and cyber security skills in Australia’s workforce for its final report. To inform the development of this recommendation, we are seeking views and evidence on:   * What role (if any) does government have in increasing the number of students and workers undertaking formal and unaccredited education and training in digital and data skills, given that various options are already being offered and taken up? * How could the skilled migration program be made more relevant to current and future digital and data skill needs — for example, by improving the occupation list or changing how skilled visas are granted? * Are existing government programs to improve digital literacy adequate, or are some cohorts still at risk of being left behind in an increasingly digitised world? * How large are the productivity gains to be had from meeting Australia’s digital and data skills needs or, conversely, what is the size of economic losses associated with failing to meet these needs?   Note that other interim reports to be released for the 5-year Productivity Inquiry will cover the topics of Australia’s education and training system, and skilled migration policies, more broadly. Feedback about these policy areas in general and as they relate specifically to digital, data and cyber security skills will be combined for the Commission’s recommendations in the final report. |

ACCAN considers that the government has an important role in supporting the development of digital skills and literacy through ongoing investment. ACCAN is supportive of existing digital literacy programs which have focused on delivering foundational skills in digital literacy. However, we note that existing programs are focused on improving the digital literacy of specific cohorts, e.g. seniors.

Accordingly, the scope of current Government programs needs to be expanded to support low use and low access groups, including remote Indigenous consumers, newly arrived migrants, people with disability and people from culturally and linguistically diverse communities. Digital literacy and device schemes for these communities, is critical to supporting them to be digitally engaged and allow them to build the digital, data and cyber security skills necessary to fully participate in society.

We support greater government investment in digital literacy, cyber security and data skills to improve productivity, address digital exclusion and reduce the digital divide. As a matter of priority, we encourage government to examine opportunities to target investments in consultation with the community sector organisations and communities to support the development of appropriate place-based programs.

# Balancing cyber security and growth

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| **Recommendation direction and information request 3.4**  **Balancing cyber security and growth** |
| The Commission is considering a recommendation on the government’s role in maintaining Australia’s cyber security in its final report. There are a number of government initiatives that could be helpful — we are interested in hearing from stakeholders about their potential benefits and costs, and how they could be implemented. In particular, the Commission is seeking views and evidence on:   * Whether the critical infrastructure legislation led to any unintended consequences (such as increased costs or deterred investment) and, if so, what changes could be implemented that would support both cyber security and productivity growth? * What can government do to incorporate cyber security into its technology procurement decisions, in a way that encourages suppliers to invest in cyber resilience and response but does not impose unnecessary burdens? * How could government work with industry to build automatic cyber incident reporting into security software, and what would be the benefits and costs of this approach? |

Consumers and communities may face material impacts from the disruption of telecommunications services. To mitigate the potential impacts of disruption, we support prudent and efficient investments to improve resilience and security of critical infrastructure. In supporting prudent and efficient investment we support full consideration of the costs and benefits of further investments in cyber-security.

In considering any unintended consequences of the *Security of Critical Infrastructure Act 2018* (Cth) Act, we encourage the Productivity Commission to examine opportunities to consolidate and clarify cyber-security obligations in the context of the telecommunications industry. We consider that consolidation of regulatory requirements will allow for the clarification and strengthening of existing arrangements, facilitating compliance and limiting the risk to consumers of service disruptions.

# Supporting ethical use of technology and data

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| How should government support the ethical adoption of new uses of technology and data, particularly for applications outside of artificial intelligence? |

There has recently been a significant amount of national discussion related to the ethical adoption of artificial intelligence (AI) technologies interrogating the nexus between consumer protection and digital innovation. ACCAN is of the view that much of this can be applied to emerging technologies more broadly. Thereby, providing a framework for the expansion of both public and private adoption of new and emerging data driven technologies which foster innovation while being safe and ethical as well as garnering community trust and uptake.

The Australian Human Rights Commission (AHRC) report, Human Rights and Technology,[[18]](#footnote-19) makes a number of practical recommendations which if adopted would help to secure an innovative and safe digital future for Australia. ACCAN recommends that the Productivity Commission utilise these recommendations in the development of its report to Government.

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| What would be the benefits and costs of any government activity on technology and data ethics? |

As noted above, the benefits gleaned from a national approach to the implementation of a framework for safe and ethical data technologies would likely outweigh the costs. By adopting such a framework, Australia would be able to promote innovative emerging data driven technologies with the necessary social capital required to encourage adoption across government and private sectors. This in turn would increase productivity and social good. ACCAN echoes the Consumer Policy Research Centre’s call for the Government to take a holistic approach to data and policy to ensure that emerging data-driven technologies provide both economic and social benefit.[[19]](#footnote-20)

Again, ACCAN directs the Productivity Commission to the AHRC report for practical recommendations for the adoption of a government led approach to the use of safe and ethical data.

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| If some regulation is required in Australia on ethical issues, how can the government identify high-risk settings where regulation would be most appropriately targeted? |

ACCAN is of the view that there exists a significant body of research on how best to identify and ameliorate high-risk settings occurring with emerging technologies. For example, technologies that pose individual and/or societal harms.

The Productivity Commission report identifies many examples which can provide the necessary guidance for the development of necessary regulatory instruments to ensure safe and ethical use of data and technologies that provide both productivity gains and social good. For example, ACCAN expects that any such regulatory instruments would embed the ethical principles developed by CSIRO Data 61 and the Government’s Department of Industry, Science and Resources.[[20]](#footnote-21)

# Coordinating the policy and regulatory environment

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| **Recommendation direction and information request 3.6**  **Coordinating the policy and regulatory environment** |
| Efforts to coordinate policymakers and regulators in the digital, data and cyber security areas are in the early stages, and the Commission is considering a recommendation on improving and broadening coordination and engagement for its final report. To inform the development of this recommendation, we are seeking feedback on:   * Whether there is evidence that poorly coordinated policy and regulatory activity in digital, data and cyber security areas have negatively affected businesses’ investment, innovation or productivity? * What policy issues and regulations are most important for agencies to coordinate on domestically and/or internationally, including both current and emerging areas? * Which policymakers and regulators must be involved to effectively coordinate government activity in digital, data and cyber security areas, and how should they be coordinated? * Are there costs associated with more policy and regulatory coordination, and how could these costs be minimised? |

ACCAN has observed limited evidence of poorly coordinated policy and regulatory activity in digital, data and cyber security areas affecting businesses’ investment, innovation and productivity.

There is merit in policymakers and regulators coordinating efforts where they have similar policy objectives. Greater coordination regarding policies to address digital exclusion would be beneficial. Overcoming digital exclusion requires a more holistic approach due to the various and conflating dimensions to digital exclusion. Coordinated efforts should span Federal, State and Local Governments, as well as inter-departmental such as the Department of Education, Department of Social Services and Department of Infrastructure, Transport, Regional Development, Communications and the Arts. ACCAN supports the ADIA’s recommendation for the Government to champion the creation of a common understanding and set of objectives in order to coordinate and enhance the fragmented efforts of those working in the digital inclusion space.[[21]](#footnote-22)

The formality of such coordination should be in proportion to the expected benefits to be gained. Coordination costs may be substantial if it requires the establishment of a new entity or more resources needed for the secretariate. One of the largest costs created through more coordinated efforts is due to increased time it takes to develop policy and regulation. The more formal the coordination activity, the greater the associated costs, which should only be done if there is sufficient benefit to be gained.

The Australian Communications Consumer Action Network (ACCAN) is Australia’s peak communication consumer organisation. The operation of ACCAN is made possible by funding provided by the Commonwealth of Australia under section 593 of the Telecommunications Act 1997. This funding is recovered from charges on telecommunications carriers.

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