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Regional Telecommunications Review 2021 Submission

2021 Regional Telecommunications Review Secretariat
Department of Infrastructure, Transport, Regional Development and Communications
GPO Box 594
CANBERRA ACT 2601

Dear 2021 Regional Telecommunications Review Secretariat,

My name is Dr. Holly Randell-Moon and I'm a Senior Lecturer at the Dubbo campus of Charles Sturt University. I am currently finalising a research project, *'It just works!': Regional and rural consumer understandings of smart technologies in North West New South Wales* (2021). The project is funded by the Australian Communications Consumer Action Network (ACCAN) and is one of the few studies to examine this consumer base. The Report draws on an evidence base from over 130 participants and 6 case studies including Dubbo, Wellington, Narromine, Peak Hill, Gilgandra, and Local Aboriginal Land Councils. The project included a questionnaire and interviews.

I summarise key findings from the project that are relevant to the 2021 Regional Telecommunications Review. More information about the project and the results can be found here: https://smartregions.csu.domains/

The project identified the following key themes and issues regarding regional and rural consumer experiences of telecommunications:

- Polarisation in perceptions of telecommunications quality, participants either assess quality as 'pretty good actually' or 'ordinary'
- Telecommunications are crucial to support liveability, growth, and regional and rural futures
- Digital literacy and digital divides impact telecommunications access
- Uneven service provisions experienced as arbitrary
- Confusion regarding consumer rights in relation to emerging technologies such as smart technologies and applications
- Ewaste (electronic waste) considerations
- Inclusivity, Aboriginal Land Councils are key stakeholders in planning and development in the region, including telecommunications
    - This project included relatively few respondents with a migrant background, older peoples (70+ years old), and people living with a disability
    - These communities will grow in the years ahead in regional and rural areas and they are important stakeholders in regional and rural telecommunications planning

- Polarisation in perceptions of telecommunications quality, participants either assess quality as 'pretty good actually' or 'ordinary'

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While the project report (2021) generally found telecommunications quality was good in the very centre of towns, this quality could vary dramatically depending on the distance from town centres. Participants tended to assess telecommunications quality as 'pretty good actually' or 'ordinary'. Respondents in the questionnaire assessed the quality and reliability of telecommunications in the town/s they reside in as Fair, with a third reporting Good, and Not Great, Great, and Poor in smaller numbers. When sorted by town, the results indicate that Dubbo was reported as Good in higher proportions than the other towns. Many participants described telecommunications quality as 'pretty good' and 'not too bad … for the majority of people that live in town'. Others described telecommunications quality as 'terrible' and 'ordinary', with one group of participants stating, 'the NBN [National Broadband Network] is a nightmare'.

- Telecommunications are crucial to support liveability, growth, and regional and rural futures

Participants have a strong investment in telecommunications quality because it impacts on liveability, growth, and regional and rural futures. Quality telecommunications is positioned as a solution to population drift to larger towns and a factor that influences people's choices to stay in a particular town. Investment in the region is also connected to telecommunications infrastructure with the former requiring the latter. Government infrastructural delivery problems and gaps can be met by private investment, but this paradoxically can only take place if quality telecommunications infrastructure is already in place. There was concern from participants that lack of quality telecommunications infrastructure and coverage was impacting jobs and discouraging industry in the areas. Business efficiency was also an issue for Land Councils where their work is increasingly completed online. When internet or mobile coverage for surveys is not possible, mapping is done by hand and then digitised on return to the office.

There was evident frustration with federal and state programs intended to improve telecommunications infrastructure. The government broadband infrastructure, the NBN (National Broadband Network), was described as slow, not competitive in regional areas, not well aligned with community service obligations, and potentially exacerbating rather than addressing infrastructural inequality. The federal government's Mobile Black Spot Program was also considered slow and inefficient. Though the project lead asked participants about the federal government's Regional Connectivity Program, it was not discussed as a key resource for resolving telecommunications issues.

- Digital literacy and digital divides impact telecommunications access

Service gaps exacerbate a series of overlapping digital divides. Consumers and businesses who can access the internet often over-purchase to secure this access. Internet costs for businesses and farms have also been aggravated by the drought. Dubbo has been dubbed by the media as a 'digitally divided city' due to the speeds offered by the different NBN connection types in different parts of the city (Thompson, Carter & Richards, 2020). The Australian Bureau of Statistics reports that around 20% of Dubbo residents do not access the internet from their home dwelling, compared to around 14% at the national level (2020).

There was a strong perception among interviewees that age has a big impact on digital literacy and digital use. Due to a perception that older people did not use technology as much as young people, this was considered an obstacle for older people's digital literacy. According to the results of this questionnaire, it is people in the 30s and 40s age group using smart technology more consistently and hence, are more likely to assess their digital literacy as higher than other age groups.

Participants also discussed some of the difficulties in obtaining digital literacy. Public libraries and TAFE (Technical and Further Education) run digital literacy courses but there is limited public transport infrastructure in the regional and rural towns studied. If people are not within walking distance of these facilities, it can be difficult for them to attend. Land Councillors also stated they facilitated access to digital and online technologies for First Nations residents.

- Uneven service provisions experienced as arbitrary

Participants discussed accessing the internet as arbitrary, where one day service may be fine and another day, the service is poor. Participants discussed the time delays with trying to connect, download, or upload data to the internet and folding in other business or domestic work around these tasks so as to not waste time. Others spoke of driving into town to download large files because satellite internet is too slow to manage them. Another issue identified in the project, and which affects service provision, is that what is reported on NBN and other service providers' maps does not equate to experience of internet and mobile coverage on the ground. The project endeavoured to confirm via coverage maps gaps reported by participants as a form of fact checking. Sometimes these gaps were not confirmed on the maps. We do not wish to discount people's experiences however. In one case, participants appeared to reside right on the edge of the mobile coverage maps provided online, which resulted in some days with good service and others with gaps.

Needing to cover gaps in internet service provision and policy comprises a core regional experience of telecommunications infrastructure. Participants in the project highlighted how gap coverage is not sustainable for regional and rural growth. In this author's experience, she enrolled in FTTN unlimited and the service provider activated an NBN plan that offered maximum internet speeds of 100Mbps download and 40Mbps upload. After signing up, she was then informed her residential address could not actually receive these speeds as the maximum is 70.47Mbps download and 26.37Mbps upload. It was suggested she sign up for the NBN50 plan, which is 50Mbps, but she has kept the original plan to receive the maximum 70.47Mbps rather than going down to 50Mbps. In other words, she is paying more in to order to ensure the maximum speed possible.

New telecommunications provisions enable access to the internet regardless of infrastructure and update older universal service obligations with universal service guarantees. However, since access could mean through fibre, fixed wireless, or satellite, there are significance differences in the quality and speed, making the provision of access to the internet potentially inequitable. According to recent policy requirements, the NBN is meant to deliver universal service. But use of existing copper wires and fixed wireless will result in different speeds. Information published by the government in early 2000 acknowledged that digital universal service obligations would be cost prohibitive (Jackson, 2000). Recently the commitment to deliver 100 megabit per second (mbps) speeds for fixed wireless was dropped (Conifer, 2018).

- Confusion regarding consumer rights in relation to emerging technologies

Confusion regarding consumer rights in relation to emerging technologies such as smart technologies and applications was evident in the project data, particularly in relation to data ownership, remote data monitoring, and who to go for advice or complaints regarding smart tech. In response to whether Dubbo Local Council has a remote data monitoring policy, most respondents said they were Not Sure with a small amount reporting Yes. 1 respondent answered correctly: No. Respondents were equivocal in who they should contact regarding data/information produced by a council operated smart technology. The majority reported going to their local council and Go to the Information and Privacy Commissioner NSW. Half reported going to the Australian Communications Consumer Action Network. Local Member for Parliament and local Aboriginal Land Council were reported in smaller numbers. Half the respondents who reported local Aboriginal Land Council identified as First Nations. There was a 0% response for Other.

What are consumers' rights in relation to these emerging technologies and which bodies are responsible for protecting and mediating these rights? Given the federal and state push for smart policies and planning, the *Local Government Act 1993* (NSW) may need to be updated to account for digital infrastructure resourcing and planning.

- Ewaste (electronic waste) considerations

Another consideration for emerging technologies such as smart applications is the associated ewaste (electronic waste) generated from the proliferation of smart devices and their supporting infrastructure. Smart technologies are made with Rare Earth Elements and other materials which are difficult (but not impossible) to recycle. Much of the material used to manufacture smart devices such as smart phones is not

biodegradable and can be hazardous when the devices are disassembled. This also holds for smart accessories as well as the cables, towers, and infrastructure used to make them work. The ewaste from smart technology obsolescence is one of the fastest growing areas of waste. Typically the costs of ewaste are born by consumers and the expectation for council services to increase their use of smart technologies will also require policy solutions. It is important to consider how consumer costs for ewaste may increase telecommunications debt for regional and rural consumers.

In two out of the five towns studied for this project, free ewaste and recycling services were offered. One town has a free waste transfer station. Smaller towns are less advantaged in terms of ewaste infrastructure and lack the presence of chain businesses in larger regional cities that also accommodate ewaste. For some towns, there may be a consumer cost involved in disposing of specialised waste such as ewaste. Some of the towns had more developed digital and smart planning and policies than others. In these policies, smart technologies were connected to more environmentally sustainable management (for instance through the use smart water meters). None of the planning and policy case studies surveyed explicitly connected the increase of digital technologies with an increase in ewaste. At a state level, both the Smart Infrastructure Policy and Smart Places Strategy mention the role of smart technology in improving waste infrastructures and efficiencies but do not explicitly connect the use of the former with the production of ewaste and the need to plan for managing this waste.

- Inclusivity, Aboriginal Land Councils are key stakeholders in planning and development in the region, including telecommunications

This project included relatively few respondents with a migrant background, older peoples (70+ years old), and people living with a disability. These communities will grow in the years ahead in regional and rural communities and there is a need to include them as stakeholders in smart cities and regional community planning.

It is unlikely there will ever be a cost recovery for providing internet services for some regional and most rural areas. While governments at all levels are promoting regional connectivity and smart policy planning, and some local councils are engaging in planning with external tech businesses, it is difficult to see how parity for consumers in rural towns, regional cities, and metropolitan cities can be achieved without significant investment in telecommunications infrastructural equality.

Many thanks for the opportunity to consider this submission.

Kind regards,

Holly.

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