



RRR NETWORK

# RRR Roundtable

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## HOW CAN THE REGIONS ACHIEVE DIGITAL EQUALITY?

Many regional locations scattered across Western Australia have limited phone service or internet access. Reliable internet remains a significant barrier to gender equality for women by limiting her opportunities to work from home, study or start-up a business. On a whole, digital connectivity is an issue for all regional people limiting their capacity to grow, diversify markets and inspire innovation. What can be done to improve access or what are the gaps that telecommunication stakeholders are struggling to overcome?

This Roundtable was sponsored by nbn with the below guest speakers.



**Hon Sandra Carr, MLC, Member for the Agriculture Region includes the Legislative Assembly electorates of Central Wheatbelt, Geraldton, Moore and Roe** - Sandra is based in Geraldton and is a passionate and dedicated advocate for regional communities and community wellbeing. She understands that the foundation of community wellbeing is sound infrastructure and services, including education, health, and mental health services.



**Naomi Evans** - is the Head of nbn Local for WA and leads a team of community and stakeholder professionals that work to shape, inform and educate regional customers to better participate in the digital economy. Naomi is a proud West Australian and is passionate about bridging the digital divide through working with key regional stakeholders and communities to identify telecommunication opportunities and challenges.



**Penny Griffin** - Project Manager Regional Telecommunications for Department of Primary Industries and Regional Development. Penny and her team manage the State's \$85 million Regional Telecommunications Project that is expanding mobile coverage across regional Western Australia in partnership with Telstra, Optus and the Commonwealth Government's Mobile Black Spot Program and Regional Connectivity Program.



**Wendy Duncan** - Former Member for Kalgoorlie, Wendy Duncan, grew up on a pastoral station in the goldfields. She was the first female State President of The Nationals and helped develop and implement the Royalties for Regions policy. She held three seats in the WA State Parliament from 2008 where she was the first female Leader of the Nationals in the Legislative Council, Parliamentary Secretary to the Minister for Regional Development, and Deputy Speaker in the Legislative Assembly. Wendy graduated from the Institute of Company Directors Course in 2016.

Limited access to the internet is not only a frustrating occurrence, it has much deeper social and economic ramifications. These impacts are felt far greater across the regions than metropolitan areas due to isolation, small populations and digital technology market failure. What can be done to overcome this?

The RRR Roundtable on the 3rd September 2021 set out to discuss 'Regional Digital Connectivity' with the leading question 'how can the regions achieve digital equality?'. What was resolved by the discussion group was that equity should be our pursuit rather than equality. Recognising that the digital needs of regional people are different to those in the metro areas as they require additional resources to achieve equal digital outcomes. What the discussion highlighted was that limited to no digital connectivity in the regions has significant impacts, such as accelerating social isolation, increasing risk of personal safety, limiting education outcomes and technology capabilities, inhibiting workforce development, and challenging circumstances for victims of family domestic violence who are trying to exit safely.

On the flipside, access to the internet and mobile coverage in remote Aboriginal communities has reportedly increased an interest to learn how to use a 'keyboard' for example, making digital connectivity a key driver for education but this is only a recent development, with only 64% of West Australians currently connected to the nbn. Work is being done to offer satellite (nbn Sky Muster) in remote communities so that its residents can access wifi. Satellite services are expected to improve in 2022.

Telehealth has also been a winner for the regions and has been well accepted by indigenous and remote communities. An unexpected consequence of the pandemic and regional connectivity has been the expansion of telehealth and an ability to call on higher expertise and knowledge. This has provided greater security and safety to our regionally based health service providers. For example, a nurse in Laverton had explained that she was going to leave as she felt scared with the health issues she had to deal with, and to now know that she has specialist support via Telehealth she felt safer to continue working.

Naomi Evans from nbn took the opportunity to cover off on some misinformation and complex technology definitions for the discussion group. For instance, nbn is not Telstra. nbn is the national broadband network and nbn is a wholesaler. There are over 120 Retail Service Providers (RSP) who provide nbn and there are different technologies to deliver the nbn. Naomi's advice was 1) know what technology you've got and access to in your area 2) find a RSP that can deliver what you need and 3) when your internet is not working speak to your RSP because if the issues are not raised, no improvements will follow.

Almost 30% of Survey participants did not know the difference between national broadband network and mobile coverage technologies. (RRR Network Survey "Digital Connectivity Regional WA, August, 2021)

Digital infrastructure across the regions has its limitations and this remains a major hurdle in delivering reliable digital services to all West Australians. Penny Griffin who is the Project Manager of Regional Telecommunications for the Department of Primary Industries and Regional Development said "the truth is, despite all the work we've done to date only just under 27% of WA has any mobile coverage at all and with the current technologies we are never going to cover it all". The only realistic technology on the horizon to reach all the isolated areas is satellite, particularly the low earth orbit constellations, but these aren't quite at scale yet.

Penny and her team manage the State's \$85 million Regional Telecommunications Project that is expanding mobile coverage across regional Western Australia in partnership with Telstra, Optus and the Commonwealth Government's Mobile Black Spot Program and Regional Connectivity Program. Over 360 mobile base stations have been co-funded to date in regional, rural and remote areas. The Project also supports other connectivity solutions including transmission upgrades, fixed wireless installations, community-scale Wi-Fi and mobile network resilience measures.

When discussing gaps, Penny mentioned how more work needs to be done for those people currently on the margins of poor service areas who require capacity injection of some form. In addition, the pandemic has seen an increase in complaints with overloaded networks making for unreliable connectivity. As a result, Telstra reportedly had to double their network capacity the past 18 months to keep up with demand. Wendy Duncan strongly believes in digital advocacy and encourages everyone to hold on to their recently increased data "with their life!".

What remains one of the biggest stumbling blocks for digital equity is that of low population density there is market failure. On this point Wendy gently reminded us that the return on investment for digital infrastructure to expand further out into the regions is low and harder for key stakeholders to justify the investment. However, "as much as that makes us impatient we need to wait for improved technologies" said Wendy. Although, the latter reinforces the structural inequity of regional digital connectivity and slow to no expansion in WA.

Another raised issue to reliable internet was redundant technology. For instance technology that was installed 5 years ago does not efficiently support today's technology and this is an ongoing access and affordability issue. For example if you're changing from ADSL to Satellite, and your modem is 5 years old then you will need a new modem, this ensures the new technology is working at its optimum. It was discussed at length how building digital capacity of people is essential to ensure people remain connected. Education to people around digital technologies is key, such as how to use it in your day to day life and to remain open to changes in technology, so to keep flexible to ensure you stay up to date. Although affordability remains a significant challenge.

The Hon Sandra Carr MLC highlighted the principle of equity with additional costs and often changing technologies for regional people to access digital connectivity. Cost of technology was raised multiple times particularly among youth and the burden on parents to provide to complement learning outcomes at school. Some families cannot afford tablets or smartphones meaning their children are at risk of not developing their digital skills with those that can.

In addition, limited digital access has long term sustainability consequences for the regions. When increasingly the way we work is reliant on technology and the internet of things (IOT's) and if regional people can not access reliable internet this will drive people out. If the regions cannot remain competitive in digital access, decreasing populations are a risk.

63% of survey respondents had more than four devices connected to the internet from the home and 100% used the internet at home for work or study. (RRR Network Survey "Digital Connectivity Regional WA, August, 2021)

**Case Study highlighting internet challenges and affordability:**

*We live 100km north of Perth. We have 2 nbn Skymuster services: one in our home and one in our separate office building on same property: Office is with Skymesh Plus 100GB (50GB peak)@ \$69.95/month and Home is with Active8me Sonic 300GB (65GB peak) @ \$54.95/month. Our office runs 3 computers used by myself, my partner and 2 part-time admin officers. We deliberately chose two providers so that if one service is down the other may be working, except when it is a nbn issue. We had one instance when I was loading documents to an e-tender when the internet crashed in the office. I had 20 minutes to load files onto a USB, run up to our house, load tender onto my laptop and submit using home internet. I got it submitted with 7 minutes to spare! We also have a Telstra dongle: Netgear Aircard 4GX Advanced III, for 1GB @ \$5.00/month as a backup if nbn is down. We rarely use this, but the cost of \$60.00 per year is a small cost to have an alternative if Skymuster nbn is down at any time. We can see the Telstra 4G tower from our office, approx. 700m on the hill behind our property. Yet we only get 1 -2 service bars in the office or yard. I was on a WebEx meeting to Europe earlier this week, negotiating on a major contract, where the voice quality broke down completely while using nbn. We changed to 4G dongle and resumed the meeting with a much better connection. However, the speed test of the two systems didn't reflect this: 4G was 2/3 Mbps and NBN 44/12 Mbps. Why this is the case is beyond my technical knowledge. In summary, I believe the quality and cost of internet services to rural and regional businesses is inequitable to that available in urban areas.*

Sandra confirmed that the WA State Government is committed to improving connectivity in regional WA and works alongside the Commonwealth in achieving this. The Commonwealth investment into broadband has been \$52b, \$308m to the Black Spot program, \$167m into the regional connectivity program and \$13.1m into Digital Farms grants to name a few.

Moving beyond infrastructure barriers to digital access for our regions the discussion group heard from Kendall Whyte, Founder of the Blue Tree Project. Kendall shared the personal story of her brother and how limited mobile coverage on her farm may have played a role in his tragic death. Having reliable access to mobile coverage and the internet allows isolated people to remain connected and therefore is a major driver in supporting mental health.

Esther Scwald from DVassist, an organisation dedicated to those experiencing Family Domestic Violence (FDV) in regional WA spoke about the need for reliable mobile coverage and the internet for cases of FDV. Making a call or educating oneself on how to exit are the critical steps for victims and if it is the case that almost 75% of WA's landmass does not have mobile coverage, there are many people today living at risk.

**Conclusion and Recommendation:**

Finally, the theme "we don't know what we don't know" resonated with the discussion group in two ways. First, it may be the case that we can improve our internet access if we explore options and learn about other available technologies. Furthermore, remaining up to date with changing technologies facilitates flexible thinking and digital problem solving. If people feel uncomfortable about making changes because it may cause disruptions to their existing service and potentially create new problems, that careful planning before making any changes is recommended.

Regional Tech Hub - <https://regionaltechhub.org.au> has also been introduced to support regional people with their questions regarding accessing the nbn. Whilst this initiative is a positive step forward, it remains the case that effectively communicating with RSP's to work through internet issues and getting access is problematic and more work needs to be done in this space.

Digital technologies at present cannot sufficiently meet the demand of all people, especially those in rural regional and remote parts of Australia. In saying that, it would seem that digital advocacy needs a bigger voice and more people need to advise their RSP's if they are experiencing poor internet service. When we remain silent because the task of engaging the RSP is frustrating or difficult - no improvements will be made. For instance, during COVID-19 there was increased demand for more data which was met to some degree.

To overcome market failure due to small populations more work needs to be done in advocating for access regardless of where technology is currently at. Advocating needs to be a collective, not only local government, small business but individuals. At some point in time, technology will improve and the regions must demand equity immediately when it becomes available.