



Submission to Department of Infrastructure, Transport, Regional Development and Communications

2021 Regional Telecommunications Review Submission



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Executive Summary

Parkes Shire Council would like to thank the Australian Federal Government for the opportunity to put a submission into the inquiry into the Regional Telecommunications.

As we are emerging from the current pandemic, we are extremely grateful to the role that technology has played in our daily lives - it has allowed us to continue working, educating our children and enabled us to keep in touch with love ones, whether they are across the street, the country or around the world.

During this period, we have seen people rethink how they live and work and many people are opting for "tree changes" as the possibility of choosing of living where we want to live rather than



where we need to live for work opens new doors and possibilities. For regional communities this decentralisation of people (not just businesses) can bee seen as a boon and we need to be ready to attract new residents. People are looking for "liveable communities" and technology and the access to it plays a significant role in people's decision about what makes a "liveable community".

The tyranny of distance rhetoric is often spoken about as being a disadvantage to people living and working in regional NSW. But technology has the power to address this issue and open up the regional areas of NSW and Australia to people to live, visit, work and invest but for this to be achieved technology and communications systems have to be fast, affordable and reliable.

Without access to technology, major infrastructure projects such as new schools, hospitals, decentralisation of businesses to regional areas and investment in infrastructure will simply not happen and regional areas will continue to be disadvantaged.

Parkes is fortunate in having fire optic telecommunications infrastructure already in the ground. The rollout of the National Broadband Network (NBN) has strengthened telecommunications and increase the opportunity for virtual communication in Parkes and remote working opportunities - however it is far from perfect.

Parkes Shire covers an area of 5,919sq km and further investment in telecommunications infrastructure both through internet connections and mobile connections is required to ensure that our community continues to be a safe of prosperous place.

Parkes is located in the Central West with a population of about 15,000, it boasts a strong, diverse economy underpinned by the key industries of agriculture and mining, but also has a strong transport and logistics industry, retail and public sector.

Council is planning for the future and has started to develop a Smart Places Strategy. The strategy sets the vision for enabling technology and digital services that will deliver both business and social benefits. This plan should never sit by itself as a static document but it should address the Community Strategic Plan and the work that Council has done through the Integrated Planning and Reporting framework.

From an information, communications and technology (ICT) perspective, ICT's are enablers which will offer diversity, resilience, options and choice for business tenants and residents





From a business perspective, the strategy is not to use technology for the sake of technology – it's about enabling technologies that deliver business and economic benefits through process change and cost efficiency.

Council believes that a Parkes Smart Places Strategy should have four guiding principals

- * Baseline capacity should exceed regional needs (ie create a competitive advantage in terms of telecommunications and plan for the unknown and exciting future of the digital economy
- * Enable regional NSW to showcase their products to the world
- * Encourage the market to innovate and differentiate
- * Allow for Partnerships where possible (between private sector and government where appropriate)

Parkes is on the verge of something big. We are currently in a large construction and investment boon. The NSW Government has announced Parkes as the States first Special Activation Precinct, Northparkes Mines have recently announced two new expansion projects with a value up to \$300millions and the State Government has approved a \$2 billion new nickel and cobalt mine to the west of Parkes. The Federal Government has invested in the Melbourne to Brisbane Inland Rail with \$300 million worth of construction starting in Parkes, Pacific National has invested \$35 million new intermodal terminal and a new \$24 million manufacturing company is currently under construction.

Parkes township and the service industries within it will need to grow and change to support the growth in the SAP and our other key industries such as mining, transport and logistics and agriculture. Having strong ITC networks will allow Parkes to step up to the challenge.





1. Importance of Technology in Agriculture and in a Green Future

The Central West agricultural region is extremely rich in agricultural product. Our agricultural products are seen as **CLEAN**, **SAFE AND GREEN**. However, there is currently limited value-adding to agricultural produce in the region. A report by Regional Development Australia (RDA) Central West stated that 64% of agricultural product in the Central West leaves without being value added.

Report after report, such as the Australian Government Agricultural Competitiveness White Paper discusses the opportunities for Australian agricultural businesses.

The reports state that, for an industry of the future they need to build infrastructure for the 21st century.

Farming needs to be smarter; it needs to access premium market needs to build on our strength and we need reduce our risks, such as the impact that drought has on the industry.

The white paper states that "Australian producers have a premium product to offer. With the right supply chain and product differentiation, a premium product gets a premium price. We may never be the food bowl for all of Asia but we do have the opportunity to be its favourite delicatessen".

The Orana and Central West Regional Plan 2036 identifies agriculture as an opportunity it talks about building freight networks and making sure that we have a secure water supply.

Then if we start looking at megatrends around the world, we can see an opportunity for Australian products and innovation. CSIROs report entitled **Our Future World Global Megatrends**, talks about six main areas of change:

- 1. More from Less increasing amounts without limited resources
- 2. Going, going...gone protection of our biodiversity and global climate
- 3. The silk highway rapid growth
- 4. Forever young an ageing population and changing patterns
- 5. Virtually here digital technology
- 6. Great expectations imperative for innovation.







All of these things mean that we have to look differently at the way we manage our natural assets such as water and how we use technology monitor their us. We need to look at international best practice such as in the **Netherlands** who almost two decades ago, set themselves an ambitious target of "twice as much food, half the resources".

Since then they have reduced their dependence on water on key crops by 90%, nearly eliminated the use of chemicals on glasshouse crops, and cut their use of antibiotics by 60%. They are currently the world's second largest food export by value behind the US, which is 270 times bigger in terms of land mass than the Netherlands.

The Dutch example shows what is possible to achieve when all levels of Government, the private sector, good science, technology and the community work together to achieve sustainable long-term solutions to some of the challenges that the world is facing.

Parkes Shire Council recently hosted an online conference entitled Activating the Low Carbon Economy in Regional Australia ..

Over 20 esteemed speakers and more than 150 delegates joined in for the full day forum, which included presentations from The Hon. Matthew Kean NSW Minister for Energy & Environment, Professor Will Steffen of ANU, Professor Veena Sahajwalla of UNSW, NSW Regional Growth Development Corporation, Beyond Zero Emissions, NSW Circular, the University of Sydney, Institute for Sustainable Futures (UTS), CSIRO and more.





The purpose of the forum was to build a platform for knowledge sharing and innovation. There were many fantastic ideas shared that could be relevant to not only Parkes and regional New South Wales, but all of regional Australia.

Topics covered included the role and impact of renewable energy in the regions, the nature and benefits of a circular economy and what this means for business and government, the importance of a low carbon economy to regional and rural Australia, and how all of these will combine to embrace new industries and create local employment in Parkes, accelerating our transition to a prosperous low carbon future.

All of the ideas and the transition to low carbon circular economy principals relied on the assumption that we have reliable telecommunications services as data will be need to be collected, monitored, analysised and reported on to ensure that we move in a transparent way towards net zero.





2. Regional Telecommunications Issues and Opportunities

As part of this submission Parkes Shire Council encouraged our residents and businesses to have their say on regional telecommunications, through Council's Your Say Portal.

The short survey was based on the questions set out in the terms and reference and focussed on barriers and challenges, reliability, affordability, and regional connectivity in our local telecommunications.

We received a total of 17 submissions during the consultation period. Following an analysis of the survey results,

- 82.4% of respondents said they are currently having internet issues, and
- 76% are having mobile phone issues
- 56% use their internet and mobile for personal use and
- 44% for business.

The trends in the data show, that generally the internet connection is slow and unreliable in our local region and many people who are working from home or home schooling are experiencing internet disruptions.

The responses shows that the main perceived barriers to improve telecommunications in our region include:

- cost
- · lack of providers offering innovative services and
- products suitable to regional communities.

Another key area of concern expressed by over 40% of respondents was black spots in regional areas, including on main roads and country roads within the Parkes Shire, posing a safety risk.

Of those surveyed, 47% see their future mobile and internet usage increasing, hence there is a strong need for improved telecommunications our local region.

The survey results also demonstrated innovation where local telecommunications providers such as <u>BitWave</u> have stepped into the market to provide an alternative service to the traditional providers and have solved connectivity problems to local business.

The full survey reports and maps of issues can be found in appendix 4



Opportunity

Regional Development

Parkes Shire Council has developed the Community Strategic Plan which defines the vision for the region;

"In 2030, Parkes Shire will be a progressive and smart regional community embracing a national logistics hub with vibrant healthy communities"

Our Community Strategic Plan includes eight key future directions in achieving the vision for the region by 2030, being:

- Develop lifelong learning opportunities
- Improve health and wellbeing
- Promote, support and grow our communities
- Grow and diversify the economic base
- Develop Parkes as a National Logistics Hub
- Enhance recreation and culture
- Care for the environment in a changing climate
- · Maintain and improve the Shire assets and infrastructure

COMMETTED COMMUNITIES

ECONOMIC GROWTH

SMART
PARKES

COMMUNITY CENTING

REACTNY LIFESTYLES

The Parkes Shire vision (2030) and achievement of each future direction require timely access to appropriate technology and telecommunications services that are affordable, supported and upgradable to meet future demand. There must be absolute equity on price, performance and resilience of technology and telecommunications for regions when compared to east coast cities.

Future residents and employers (companies) that locate to the Parkes region will expect that there is a clear roadmap for delivery of the technology and telecommunications services they need to ensure that they can grow and thrive in Parkes.

Council has developed their Smart Places Strategy and is actively engaging government and commercial sector organisations to deliver local (edge) technology services that are linked to city based cloud and as a Service providers.

Our edge services are targeted to enable the current and future technology and telecommunication needs of key industries that include; logistics, manufacturing, agriculture and regional small business.





Regional Development

- 8. How can investment in telecommunications infrastructure work with other programs and policies to encourage economic development in regional Australia?
- 9. What role could innovation, including new models, alternative investors or new ways of doing business, play to encourage investment in regional telecommunications infrastructure? What are the barriers?

It is clear that the Australian "Cloud" is primarily located in Sydney and the major technology and telecommunications service providers have their headquarters in Sydney to enable ready access to multiple international carriers (price competition and resilience) and the fastest path to international business partners. The diagram below shows the number of undersea cables and data centres located in each major city in Australia¹, and highlights the current dependence of digital services on Sydney.

We note that this model suits many *Software as a Service (SaaS)* providers and other business software solutions that manage corporate business transactions. This model **not acceptable** for **all** future services required by regional industry, as this model will not;

- Support particular technologies in the regions due to latency and resilience issues,
- Enable local device integration, AI, device and application management, and analytics,
- Provide service resilience for industry located in the regions.



Investment in telecommunications infrastructure should **enable opportunities to create specific regional technology hubs** (edge services) that are specifically targeted to the requirements of local industry and enable innovation and research **in the region**.

Telecommunications services from these regional hubs should be cost effective (comparable to city pricing), have adequate capacity, and offer resilience / diverse paths. These telecommunications services will facilitate integration with cloud service providers, provide reliable access to cloud based data services (storage, analytics, backup / recovery), and enable data sharing with partners, industry bodies and researchers.

Parkes Shire Council has worked with NSW State Government on the establishment of the Parkes Special Activation Precinct. This Precinct covers 4,800 hectares of land which is ear-marked for a range of uses including freight and logistics, processing of food such as plant-based proteins, warehousing, plastic and e-waste recycling and cold chain storage. The Precinct will focus on sustainability based on circular economy princples and will be Australia's first United Nations Industrial Development Organisation (UNIDO) Eco



¹ https://www.infrapedia.com/app, accessed Sept 2021



Industrial Zone. Additional information about the Parkes Special Activation Precinct (SAP) is provided in Appendix 2.

Information and communications technology are critical enablers of the Parkes SAP and the achievement of UNIDO Eco Industrial certification. Critical technology and telecommunications components include;

- Access to high speed terrestrial telecommunications services to support ICT systems, automation, security and monitoring,
- Connectivity for IoT based services for metering, monitoring and automation,
- Access to secure and resilient edge computing capabilities.

In 2020, Council invested in pit and pipe infrastructure within the SAP to provide easy access for carriers to current and future tenants along Brolgan Road. This investment was designed to reduce the cost to carriers and tenants for the *last mile* for high speed connectivity and work towards achieving price and performance equality for business grade telecommunications services for regional business customers.

NSW Government initiated their Gig-State project, with one key objective being; "Remove the digital divide by delivering and enabling metropolitan grade services to regional areas – parity or better speed, capability and price". Any investment in regional telecommunications services should focus on the achievement of this objective.

One of the manufacturing tenants within the SAP originally considered the available wireless connectivity for their primary telecommunications services. The **performance and reliability** of the available **wireless** services did **not match the business requirements** for business grade telecommunications services, resulting in the implementation of fibre based services to the tenant with connectivity back to Sydney.

Council has considered the opportunities that are enabled by metropolitan grade business telecommunications services in the regions. Key opportunities for Council (or any regional local government agency) include;

- Better management of remote sites within Parkes and our smaller communities
- Council to take advantage of cloud services including SaaS (software as a service)
- · Increased communications options for staff internally and externally telecommuting
- Flexibility of management of consultants via video conferencing facilities (reducing travel costs)
- Wi Fi data may be used for better event management and marketing as well as in emergency situations
- Twin digital city development which would help in developing level of service real time feedback on service i.e. demand also help with asset condition and investment.
- Flexibility for residents / users i.e. once smart meters Council could offer off peak tariffs.
- Also work with industry for the most beneficial times for them to use water
- 3D modelling for developers
- CCTV network
- Management of remote tips and illegal dumping
- Vibrant communities proactive asset management and maintenance
- Camera network to be able to look at remote jobs
- Better GPS tracking for safety and efficiency





Council has recently completed several case studies relating to the use of telecommunications services to enable business outcomes, and the issues / limitations that have been encountered. The key points identified through these case studies are;

- Our businesses have only just been exposed to NBN having dealt with horrendous ADSL connections for years, therefore we would need education around the possibilities that greater connectivity will provide.
- There is a need for our retail business to step into a new digital economy, this may be the catalyst for them to make a change
- Block Chain technology allowing traceability opening new markets for regional businesses and especially for agriculture value adding
- industries Support for self service industries stepping into an automated world
- Diverse connection paths will mean that we can offer redundancy and greater uptime for businesses push and pull from customers
- Businesses can take advantage of SaaS therefore spend more time working on their business rather than in their business reducing software costs and enabling them to stay contemporary
- Better connectivity will allow a collection of data to understand their customer and target solutions and products to them
- Identify the customer patterns through data analytics.

It is evident that business based in our region is seeking to innovate and grow through the effective use of new technology connected via high performance and cost effective telecommunications services. This will require creating technology capability and skills in the region through active collaboration between industry, government, technology and telecommunications organisations. Additional case study information is provided in Appendix 3





Emerging Technologies

- 10. To what extent will new technologies enable significant change to the delivery of telecommunications services in regional Australia over the next 5-10 years? Are there any barriers to accessing these technologies?
- 11. How can Government better support the rapid rollout of and investment in new telecommunications solutions in regional areas?

Opportunities exist in the Parkes region for business innovation in key industries including freight and logistics, agriculture, processing of food, water management, warehousing, recycling and waste to energy. These industries require both information technology and operations technology supported by resilient telecommunications services. Opportunities exist for investment in telecommunications infrastructure (and edge technology) that will enable improvements and growth in these key industries, if the focus of the investments is to enable technology and services in the region with resilient connectivity back the east coast.

Industry in regional areas are able to utilise IoT based sensors for metering and monitoring for research, automation and to provide input to analytics. Gartner note that edge computing is an integral part of an IoT solution². Their research findings include;

- "Most vendors in the IoT market have recognized that edge computing is an integral part of an IoT solution. Not all data needs to be sent to the cloud or core data center — that would be costprohibitive, be bandwidth-intensive, have performance implications or would not be practical, as in the case of remote locations.
- Although most edge computing projects focus on data aggregation, normalization and basic processing, and mainly address one or two use cases, the edge computing infrastructure must be scalable and accommodate additional, complex use cases over a period of time."

Connectivity required for edge services are critical considerations for any investment in regional telecommunications services. Regions do not want to simply connect to a service hosted in Sydney where all the jobs and economic growth opportunities are also in Sydney. It is acknowledged that there are certain commodity services based in Sydney (or Melbourne) that are only enablers for regional prosperity and economic growth opportunities.

The main barrier to telecommunications investment in the regions is that the current telecommunications service model is Sydney / Melbourne centric and is not designed to enable economic growth in industry innovation in the region. The current models focus on leveraging the current investments in infrastructure and skills in the capital cities and are designed facilitate **provision of centralised services from the cities to the region**. It is acknowledged that the regions do not have the high population densities of the cities, making it more difficult to deliver the expected ROI from a mobile tower or fibre investment by a carrier.

Research from industry groups (such as Gartner) indicate that there are industry specific opportunities that support edge compute investment models enabled by high speed telecommunications networks. As these edge networks are built, there are opportunities to share or expand these networks to offer metropolitan grade telecommunications services to other consumers in the region.

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² Gartner Group - Market Guide for Edge Computing Solutions for Industrial IoT Published 17 August 2021 - ID G00737825





Maximising Outcomes

- 12. How can different levels of Government, the telecommunications industry and regional community's better co-ordinate their efforts to improve telecommunications in regional Australia?
- 13. What changes to Government investment programs are required to ensure they continue to be effective in delivering improved telecommunications?

The key to success in maximising outcomes is to increase collaboration between government, industry bodies and the regions to deliver measurable business or research outcomes **in the regions**. Previous efforts to simply fund connectivity to a region, leaving the delivery of a business outcome to someone else has delivered mixed results. This has been successful for consumer based services such has home based internet services, small business connectivity to the cloud (Sydney) and increasing mobile phone coverage by reducing mobile blackspots.

The increased utilisation of IoT, automation and AI in regional Australia requires collaboration across various types of network solutions and providers. Agrifutures research paper *Opportunities for New Technologies and Industries* (2019) identifies 39 emerging technologies for Australian rural industries. These include; Data Technologies (Digital Twins, Augmented Reality, Edge computing), Robotics and Artificial Intelligence Technologies (Collaborative Robots, Human – Machine Interfaces), and Renewable Energy Technologies (Moisture Harvesting, Artificial Photosynthesis). All these emerging technologies require telecommunications and network services that are appropriate for the technology and region of deployment.

Greater collaboration between government and industry bodies to understand these opportunities and the dependencies on telecommunications and technology will creates the opportunity to better target funding initiatives to create growth opportunities and real economic outcomes in the regions. This collaboration will also look beyond the current priority to provide most telecommunications from Sydney.



Awareness

One of the things that has become apparent through the process of developing this submission is that regional communities need more education and help about how to find the right solution to the challenge that they face with technology.

During the public consultation it became evident from the testimonials that were given was that people had spent a lot of time and money looking for solutions to connectivity issues and that they were frustrated that they had yet found a solution especially as their lively hoods depended on reliable internet. Most of the people with the frustrations were people trying to run farming and other businesses from remote areas using satellite.

The panel of experts that were hosting on the Regional Telecommunications Review - Central West NSW Public Consultation seemed to indicate that there were solutions to many of the challenges that were being discussed - it would be fabulous if these solutions could be easily made available to people.

3. Conclusion

Thank you again for the opportunity to comment on the importance, challenges and opportunities that telecommunications presents to regional areas.

For more Information Please contact
PSC Economic and Business Development Manager
Anna Wyllie





Appendix 1 – Parkes Smart Places Strategy

The Parkes Shire Council (PSC) mission,

"To deliver progress and value to our community"

along with the vision for the community,

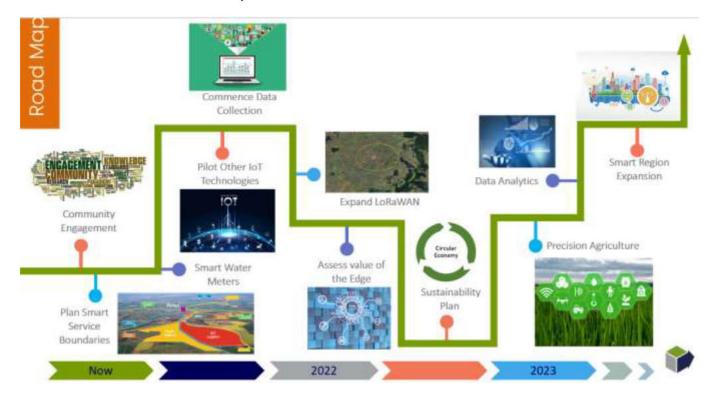
"A progressive and smart regional centre, embracing a national logistics hub, with vibrant communities, diverse opportunities, learning and healthy lifestyles"

SMART Place integrates SMART technologies into the environment to capture and convey data and insights.

The technology helps to capture information on the asset or local environment. The data is analysed to help people, councils and governments make better, evidence-based decisions about how to improve the productivity, liveability and resilience of cities, towns and communities.



The Parkes Smart Places roadmap





Appendix 2 – Parkes Special Activation Precinct

The NSW Government announced the establishment of Special Activation Precincts as part of its 20-Year Economic Vision for Regional NSW. The Precincts will be funded as part of the NSW Government's \$4.2 billion Snowy Hydro Legacy Fund, following the sale of the Snowy Hydro Scheme to the Commonwealth.

\$185 million in funding was announced by NSW Government Deputy Premier John Barliaro on Wednesday 22 July 2020 for vital infrastructure to enable development of the Parkes Special Activation Precinct.

About the Parkes Special Activation Precinct

The precinct will take advantage of its location at the only junction of Australia's two rail spines, the Inland Rail and the Trans-Australia Railway.

With the Parkes Special Activation Precinct master plan now complete, Regional Growth NSW Development Corporation (RGDC) will take on delivery of the precinct. This includes managing the land acquisition process while leading design and construction, streamlined applications and approvals and providing a business



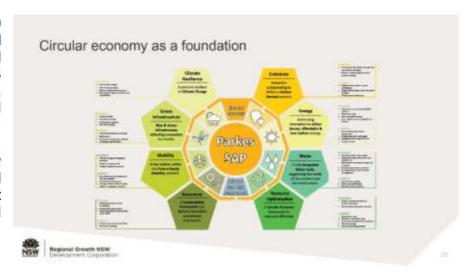
concierge service aimed at assisting those seeking to set up or expand in the regions.

The Parkes Special Activation Precinct will create jobs and prosperity not only for Parkes but the whole region.

The development will allow for agriculture value adding, open up opportunities for recycling and renewables, encourage a resurgence in manufacturing and provide a competitive network in terms of transport and logistics by leveraging Inland Rail and Parkes' strategic location at the cross roads of the Nation.

The Parkes Precinct covers 4,800 hectares of land which is ear-marked for a range of uses including freight and logistics, processing of food such as plant-based proteins, warehousing, plastic and e-waste recycling and cold chain storage.

The Precinct will focus on sustainability and will be Australia's first United Nations Industrial Development Organisation (UNIDO) Eco Industrial Zone.





These five Principles underpin the planning for the Parkes Special Activation Precinct.

Forecasts indicate that government investment in this Special Activation Precinct could generate an additional 3,000 new jobs and attract a further \$1 billion in private investment over the next 20 years.

However, this project requires IT and telecommunications services that support national logistics providers, smart manufacturing providers and the supply chain industries at a cost that is comparable to east coast cities.

An infrastructure and transport study (Aurecon) noted that both Telstra and Optus provided mobile coverage across the SAP. However, tenants within the SAP are likely to require access to a 10-gigabit fibre connection for normal business operation going forward. Supporting the peripheral connections such as autonomous vehicles and IoT connections within the SAP would be supported by a 5G wireless network.

To address the potential connectivity needs of the SAP's within NSW, the Gig-State project was initiated. This project was designed to provide high performance and resilient connectivity³;

- Enabling the government's strategy to create thriving business hubs to fuel economic development by building critical digital infrastructure.
- Enabling early participation and intervention in newly developed areas to ensure that digital connectivity networks can deliver against current and future requirements.
- Early participation and coordinated planning to reduce the cost and ensure mitigation of the risk of later retrofitting and/or upgrading to meet requirements.



Development of the Parkes SAP is progressing under the management of NSW Government. The Gig-State project commenced in 2019 but has since been terminated.

³ Parkes SAP – Digital Connectivity Overview, October 2019



Appendix 3 – Business Case Studies

Westonfence

The Westonfence ™ Fencing System was developed by a local Parkes family the Weston's in response to the need for a robust, low maintenance, electric fence to better manage livestock and control kangaroos and other feral animals on their property at Nymagee

Westonfence fencing system users recycled plastics (usually from "Drum muster") to manufacture locally insulated suspension posts used in conjunction with plain wire. The insulating properties of the insulated suspension post creates a fence which can be easily electrified without the need for additional insulators.



Council contacted one of the Director's Duncan Abbey to discuss what better connectivity would mean for his business.

Duncan discussed the possibility of outsourcing all of his software systems everything thing from payroll to web management in essence he was describing a SaaS

He also discussed the possibility of on farm monitoring of equipment, with sensors that could detect if for example a kangaroo had damaged a fence.

This sort of technology would allow Duncan's business to provide exceptional customer service by notifying the farmer of the damage and dispatching a suitable product to fix the problem.



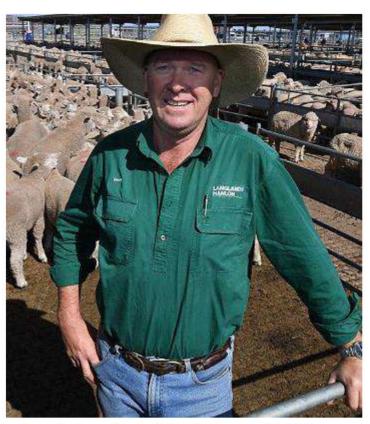
Langlands Hanlon

Langlands Hanlon is a is a family owned stock and station agent. Operating out of the same office for almost 80 years, they provide a wide range of livestock services from weekly sheep and cattle sales at the Central West Livestock

Exchange at Forbes and the Regional Livestock Exchange at Carcoar, to AuctionsPlus and over the hook and private paddock trading.

Council spoke to the Geoff Rice about what extra digital connectivity would mean for his business.

"If we had technology, we could easily use it, currently we have a crap service and we have to revert back to pen



and paper it's like with stuck in the 80s". Geoff Rice

"Being able to collect data regarding stock would allow to be more responsive to our customer's needs" We could take advantage of technology such as electronic scales and run stock over the scales and quickly analysis a mob of sheep or a herd of cattle. This would lead to better management of stock by the farmer but also would allow that we could quickly and efficiently respond to the needs of the market domestically and internally".

"This would also open up international markets and we would be able to use technology such as block chain to track the individual animals from paddock to plate. This would in enhance our marketing power".

Additional technology would also allow Geoff to run his business more efficiently and safely. Having clients throughout the Central West many of whom are situated over two hours' drive from Parkes, technology could be used to assess stock rather than having to drive long distances therefore, reducing time and risk.

In the future Geoff says that technology will help him expand his business and manage his customers expectation.



Bosmac

A family owned business based in Parkes, NSW, Bosmac has been designing, engineering and manufacturing quality agricultural and mining products for Australian conditions since 1981.

Bosmac has customers throughout Australia and Overseas

"Once you have it (better technology) more opportunities will come there are 100s of things that can be done with better technology"



James Haddin

Council asked James Haddin what he would do with additional digital connectivity. "With clients located regionally, nationally as well as internationally it would mean we could manufacture solutions for clients more efficiently.

Better connectivity would mean that we could take advantage of being able to live stream problems in overseas or remote plant and equipment to help identify problems and find solutions in a similar way to which e health is used in healthcare. In the future we could use technologies such as 3D printing to print parts closer to where they are needed, whether that is in Parkes or Thailand, this would save not only us time and costs but also our clients".

"Another way technology could enhance our service offering is that it would allow us to monitor the performance products like our roller mills. By having Systems in place we can proactively replace bearings on the mills before they fail therefore reducing downtime for the mining operations and proactively managing our client's needs".



New Advanced Manufacturing Company

An advanced manufacturing tenant recently moved into the Parkes Special Activation Precinct. This organisation required access to reliable cost effective telecommunications services to effectively manage their new operation.

The parent company's corporate policy and risk management approach is to centralise inventory and corporate data in a cloud based ERP system for all of their operational sites. These ICT services are managed through an external provider who is also their ISP, located in New Zealand.



Initial engagement with NBN and Telstra for the GLE grant to activate this new tenant and Pacific National was frustrating as neither had a process to engage for future committed development in regional Australia as they were only setup to extend services for current customers. There was no way to build in the future required telecommunications capacity now (to meet future demand) as is the current practice with all of the other infrastructure (water, power and gas).

Due to the lack of physical communication options, the advanced manufacturing tenant explored satellite, 4G and Wireless Broadband through a local bespoke provider who had set up a wireless communication tower on a mobile trailer with backhaul through a fixed Telstra fibre connection. The result was;

- The satellite option could not provide the minimum service level required,
- The 4G connection was utilised for site office based communications such as email and basic connectivity during construction and into the commissioning phased but was only ever intended to be short-term solution.
- The fixed wireless option involved a point-to-point microwave aerial being placed on the roof of the site to communicate back to the wireless trailer mount. The point to point nature of this has meant that comms regularly drop out due to high wind activity

None of these options provides the resilience, bandwidth or latency required to run their operation effectively. Based on the risk to the business, the advanced manufacturing tenant has invested \$250k in on-site IT infrastructure to run a hybrid local / cloud option for the ERP system. This is technology investment would not have been necessary if adequate telecommunications capacity was available.

As a business process, to commission and run the first shipment off-site, the operation has essentially run blind having to run their process and inventory through their local server infrastructure, then take the site off-line for a significant period while the operational data is uploaded to the cloud system and corporate data is acquired, This process is inefficient and has resulted in a significant loss of productivity and a risk to the inventory management.



This high investment could have been mitigated by a simple fibre connection from one of the major providers, requiring only a 800m run to reach their site but as they are a "satellite" site, they or Council would incur all of the cost of the first mover.

Council has managed to negotiate with a third-party fibre provider to provide a solution at one-third the cost of the original NBN / Telstra options while retaining ownership over the physical conduit to help manage the availability of service to future users and cap end-user pricing.



Pacific National

Pacific National is Australia's leading intermodal freight and steel freight operator, eastern Australia's top carrier of regional exports, bulk goods, grain, and agricultural products, the largest transporter of coal in NSW, and the second-largest transporter of coal in Queensland.

The announcement of Inland Rail has trigged a large amount of investment in Parkes including Pacific National announcing \$35mill logistic Terminal development which has the capacity to process approximately 450,000 cargo containers each year, including the ability to haul doublestacked containers from Parkes to Perth.



However, despite being one of Australia's largest freight company's with over \$13 Billion turn over the Parkes intermodal terminal is operating from a 4G connection. Initial operations commenced using the 4G connection to provide basic email and internet access for the limited number of staff onsite. The original intent was the terrestrial fibre services would become available as logistics operations increased.

As the carriers are not setup to provide services for current and future demand, Pacific National remains operating on the 4G connection. The recent implementation of the first 5G service in Parkes has actually reduced the reliability and performance (bandwidth) of the mobile service delivered to Pacific National as they are located at the edge of the 5G service, resulting in their service often switching from 4G to 5G and back resulting in service degradation.

As the mobile service is not suitable for a major regional freight and logistics hub, negotiations have commenced with NBN. This process has been slow and there are contractual requirements that remain unresolved. The mobile service remains in place today and offers and unacceptable telecommunications service for future growth of this major regional freight hub. It is unlikely that these issues would occur at a metropolitan site, due to carrier competition and existence of points for fibre connection nearby.



Parkes Council Library



The Library is a community space where individuals and community groups can access a wide range of literary, cultural, information and digital services free of charge. It currently provide programs for the people in the Parkes Shire from Birth through to home borrowing programs for elderly and house bound members of the community.

The Parkes Library is being expanded and redeveloped to enable it to meet the emerging needs of the community for a cultural, education and information hub.

This expansion includes the development of a creative MakerSpace that will allow for STEM projects, community workshops, and digital learning programs. The expansion will also include a Country Universities Centre a regional tertiary studies hub.

A dedicated internet service into the Library complex would enable community members and groups to access:

- Live streaming of events (such as concerts, author talks, guest speakers and arts/cultural events)
- Improved research options (such as virtual classrooms, videoconferencing, Skype)
- Virtual/augmented reality programs (such as virtual tours and games)
- Data visualisation & Interactive digital spaces (such as multi touch display tables, digital touch walls, enhanced local history
- digitization)
- Digital creative programs (such as 3D printing, music editing soft ware programs, app creation)

Increased connectivity would streamline and improve the reliability of many of the programs we currently provide that require internet and would enable us to get the most out of the products we have such as our library management system. It would also allow for emerging technologies which can be provided free of charge at the library



Appendix 4 Community Surveys

Please find below the responses from the community to our survey. The maps below indicate areas in town that community members have identified problems









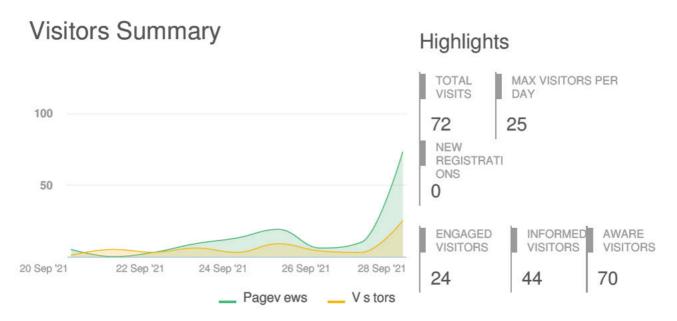
Project Report

23 Ju y 2020 - 28 September 2021

Your Say Parkes

Regional Telecommunications Review





Aware Participants	Participants 70 Engaged Participants		24			
Aware Ac ons Performed	Par c pan s	Engaged Ac ons Performed	Reg s ered	Unver f ed	Anonymous	
V s ed a Projec or Too Page	70		rieg s ereu	Oliverieu	Anonymous	
Informed Participants	44	Contributed on Forums	0	0	0	
Informed Ac ons Performed	Par c pan s	Participated in Surveys	3	0	14	
V ewed a v deo	0	Contributed to Newsfeeds	0	0	0	
V ewed a pho o	0	Participated in Quick Polls	0	0	0	
Down oaded a documen	0	Posted on Guestbooks	0	0	0	
V s ed he Key Da es page	0	Contributed to Stories	0	0	0	
Vs ed an FAQ s Page	0	Asked Questions	0	0	0	
V s ed ns agram Page	0	Placed Pins on Places	2	5	0	
V s ed Mu p e Projec Pages	17	Contributed to deas	0	0	0	
Conrbu ed o a oo (engaged)	24					

ENGAGEMENT TOOLS SUMMARY



Tool Type	Tool Type Engagement Tool Name		Visitors	Contributors		
	Linguagement 100/14amo	Tool Status	VISITOIS	Registered	Unverified	Anonymous
Place	Map it	Published	25	2	5	0
Survey Tool	Take the survey	Published	25	3	0	14

INFORMATION WIDGET SUMMARY



Widget Type	Engagement Tool Name	Visitors	Views/Downloads
Key Dates	Key Date	0	0

ENGAGEMENT TOOL: PLACE

Map it

Visitors 25	Contributors 7	CONTRIBUTIONS 7		
	need more for k ds o do n Parkes. L ke roos er, doughnu k ng. Address: 35-51 Bogan S ree , Parkes N	e mov es, f p ou , en p n bow ng, go car s, red		
CA EGORY Mob e Phone / n eme ssue	h p://yoursay.parkes.nsw.gov.au/reg ona - e ecommun ca ons-rev ew/maps/map- ?r epor ng= rue#marker-96611			
	ey ns a ed a he n ersec on of Webb	a subs u e for he NBN ha was no comp e and Char es R gg S ree s. Serv ce s for e ev s on and n erne connec on and serv		
CA EGORY	Address: 7 Avoca P ace, Parkes New S	Sou h Wa es 2870, Aus ra a		
Mob e Phone / n erne ssue	h p://yoursay.parkes.nsw.gov.au/reg ona - e ecommun ca ons-rev ew/maps/map- ?r epor ng= rue#marker-96787			
	mos y b ackspo < one bar, SOS or No Address: 2869, Peak , New Sou h W	Serv ce S gna s w h a bes regu ar drop-ou s Va es, Aus ra a		
CA EGORY Mob e Phone / n erne ssue	h p://yoursay.parkes.nsw.gov.au/reg or epor ng= rue#marker-96889	na - e ecommun ca ons-rev ew/maps/map- ?r		
WOOD & PROME / IT BITTE SSUE				
2021 09 28 13:18:49 +1000 ?	on has become ess. 3G bes we can dy wea her. Canno run a bus ness rem			
CA EGORY	Address: 2870, Cookam dgera, New So	bu h Wa es, Aus ra a		
Mob e Phone / n erne ssue	h p://yoursay.parkes.nsw.gov.au/reg or epor ng= rue#marker-97318	na - e ecommun ca ons-rev ew/maps/map- ?r		
	Mob e coverage so mpor an for farme ea and hey are of en os w h no mob	w McG rr Way. Parkes s our serv ce cen re. ers. We are ge ng a o more our sm n our ar e coverage o ca for d rec ons. A rbnb farm ask major y of he me hey ask abou n erne		
CA EGORY	access which we canno adequalely pro	ov de. L m ed and very cos y sa e e for n er		
Mob e Phone / n erne ssue	e June do ng on ne earn ng from Board	n schoo ng. I have had 2 daugh ers home s nc d ng schoo . Rura areas are be ng ef beh nd ca ons whe her be for work or recrea on. es, Aus ra a		
	h p://yoursay.parkes.nsw.gov.au/reg or epor ng= rue#marker-97347	na - e ecommun ca ons-rev ew/maps/map- ?r		
	Zero o poor recep on be ween parkes Address: enry Parkes Way, Parkes N			
	h p://yoursay.parkes.nsw.gov.au/reg.or	na - e ecommun ca ons-rev ew/maps/map- ?r		

ENGAGEMENT TOOL: PLACE

Map it

CA EGORY

Mob e Phone / n erne ssue

S ow and frequen y drops ou . Insuff c en suppor from e co's. Change of serv ce reques ed from Be ong o Te s ra bu s ncomp e e because Te s ra w no v s o conne c househo d o nbn.

Address: 13 Lawson S ree , Parkes New Sou h Wa es 2870, Aus ra a

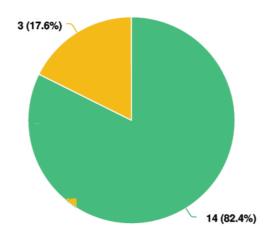
h p://yoursay.parkes.nsw.gov.au/reg ona - e ecommun ca ons-rev ew/maps/map- ?r epor ng= rue#marker-97508

ENGAGEMENT TOOL: SURVEY TOOL

Take the survey



Are you having internet issues?



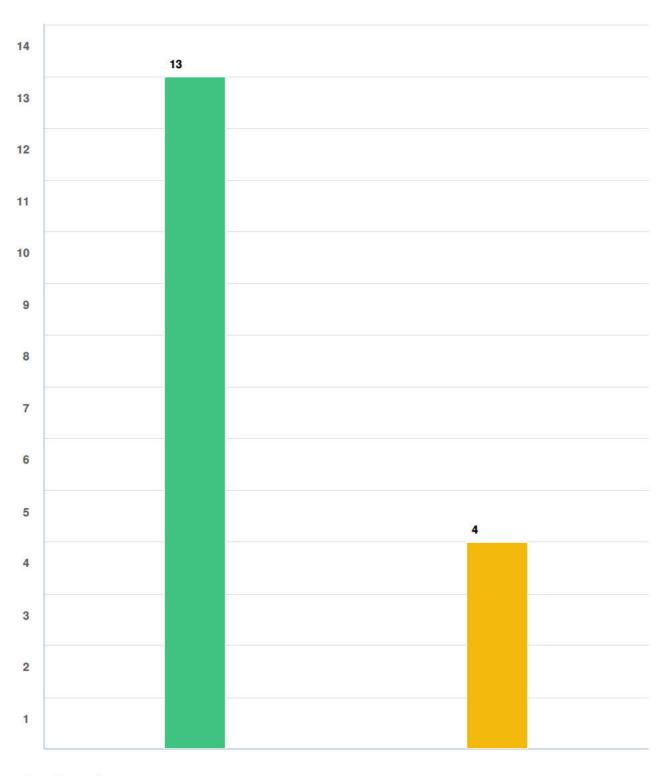
Question options

Yes
No

Optional question (17 response(s), 0 skipped)

Question type: Radio Button Question

Are you have mobile phone issue/s?



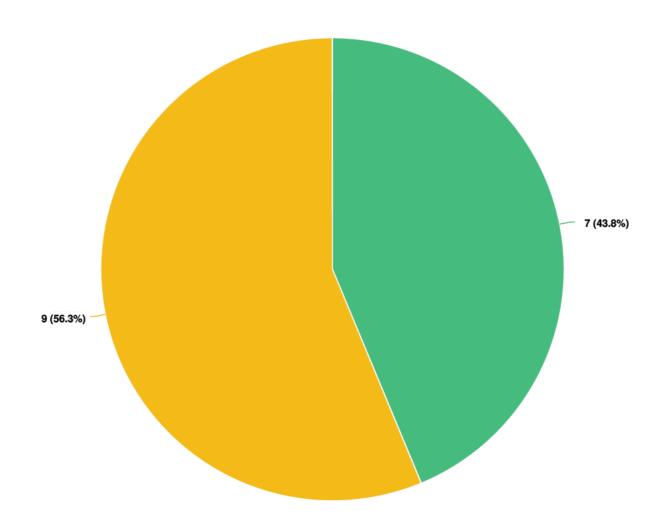
Question options

Yes
No

Optional question (17 response(s), 0 skipped)

Question type: Checkbox Question

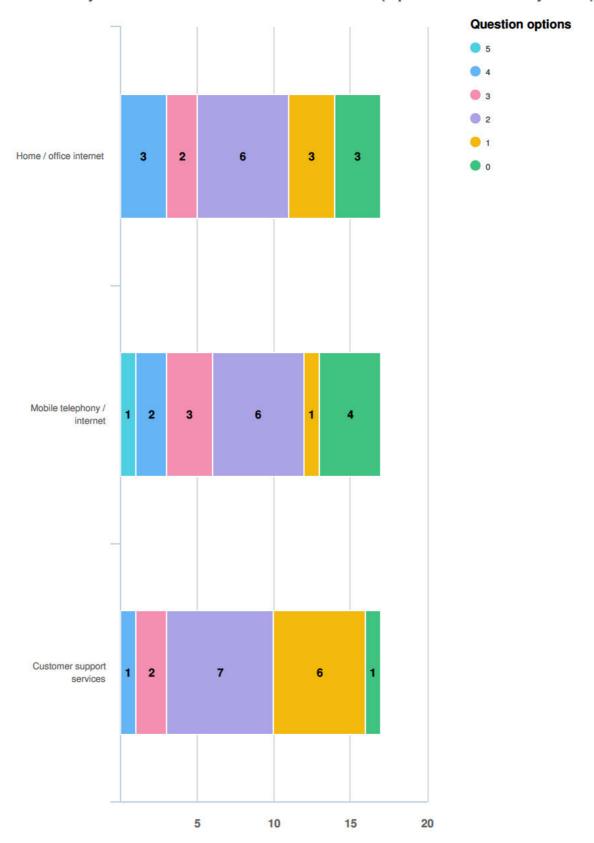
Is this for your business or for private use?





Optional question (16 response(s), 1 skipped)
Question type: Radio Button Question

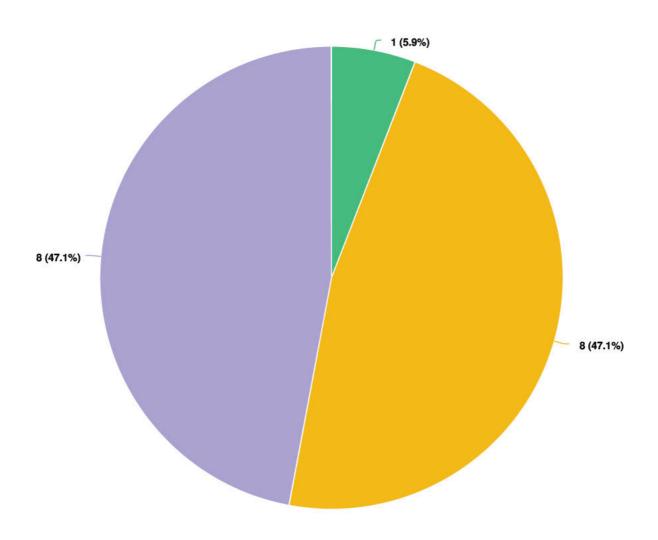
Please rate your current telecommunications services (0-poor to 5 exceeds my needs)

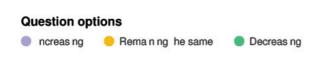


Mandatory Question (17 response(s))

Question type: Likert Question

Do you see your future usage of these services decreasing, remaining the same or increasing?

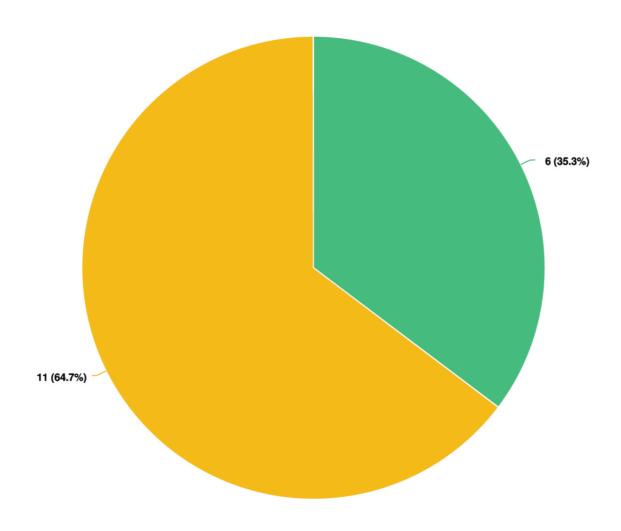




Mandatory Question (17 response(s))

Question type: Radio Button Question

Are you aware of your consumer rights when it comes to telecommunication services?

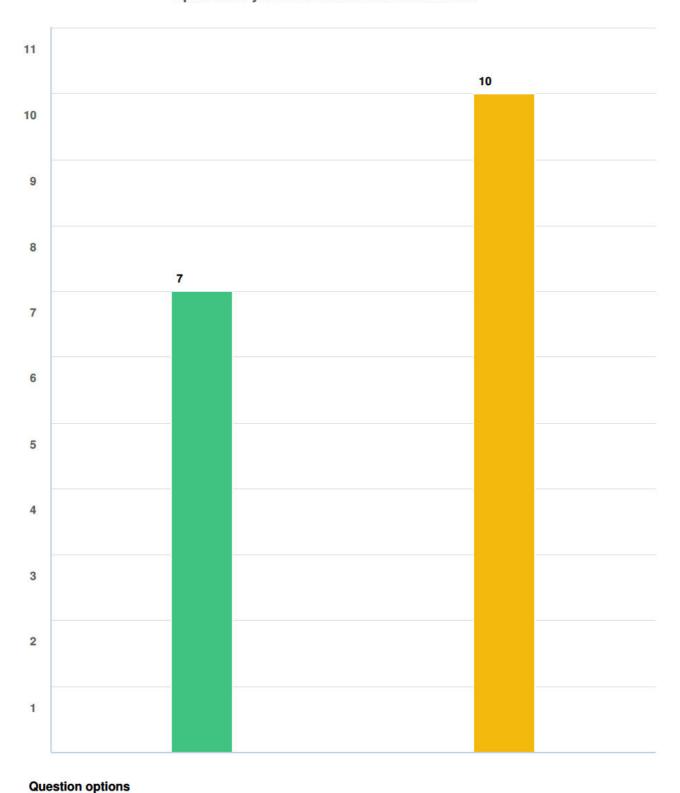


Question options No Yes

Mandatory Question (17 response(s))

Question type: Radio Button Question

Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?

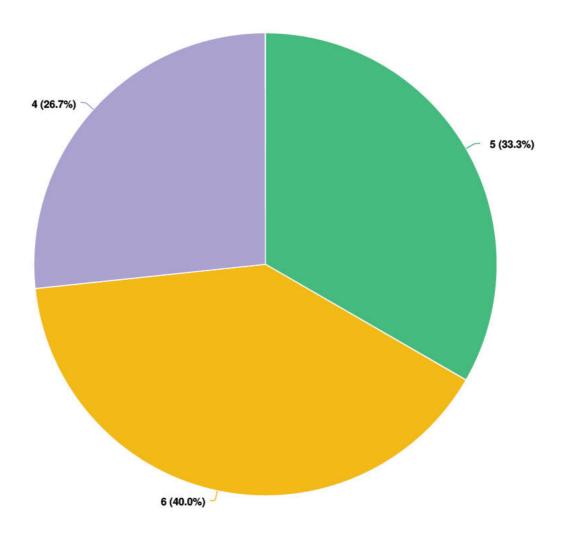


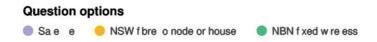
Mandatory Question (17 response(s))
Question type: Checkbox Question

Yes

No

What type of provider do you have?





Optional question (15 response(s), 2 skipped)
Question type: Radio Button Question

Survey Responses

23 Ju y 2020 - 28 September 2021

Take the survey

Your Say Parkes

Project: Regional Telecommunications Review



			rors 2 5		
С	17	is .	1	RESPONSES 17	
3 Registered	0 Unverified	14 Anonymous	3 Registered	0 Unverified	14 Anonymous



Respondent No: 1 Login: Anonymous

improvements should be made for these services?

They are affordable however fiyou can' use hem as you don' have service hen is no good.

Email: n/a

Responded At: Sep 22, 2021 10:23:50 am **Last Seen:** Sep 22, 2021 10:23:50 am

Q1. Name	no answered	
Q2. Contact number	no answered	
Q3. Contact email	no answered	
Q4. Your address	no answered	
Q5. Are you having internet issues?	Yes	
Q6. Are you have mobile phone issue/s?	Yes	
Q7. Who is your current mobile phone provider?	Tesra	
Q8. Is this for your business or for private use?	Pr va e	
Q9. What does your service provider charge per month?	140	
Q10. Please rate your current telecommunications serv	ices (0-poor to 5 exceeds my needs)	
ome / off ce n erne	0	
Mob e e ephony / n erne	0	
Cus omer suppor serv ces	1	
Q11. What are the current barriers or challenges you have for your telecommunication services?		
No serv ce a my home w hou a boos er wh ch s so expens ve		
Q12. With reference to the COVID-19 pandemic, how has your usage of digital services (Internet, Streaming Services etc) changed?		
I am work ng from home & now re y on my home in erne /service which I can' access without purchasing a boosier.		
Q13. Do you see your future usage of these services decreasing, remaining the same or increasing?		
Q14. How do service reliability issues, including outage	es and natural disasters impact you?	
There are regu ar ou ages here - more han mon h y ar	nd hey mean I have abso u e y no serv ce a a . I s unsafe!	
Q15. In your opinion, are the telecommunications services you need in your area accessible and affordable ? What		

Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required?	
Yes	
217. Are you aware of your consumer rights when it comes to telecommunication services?	No
018. If not, how could the Government assist you in u	inderstanding and using your consumer rights?
on connection options, data limits and speeds for you to make informed decisions?	No
020. What other information is needed? NA	
221. Are there any other matters that should be consi	dered for regional telecommunications and why are they
Serv ce ower n remo e areas 's unsafe on farms an	nd proper es no hav ng serv ce
222. What type of provider do you have?	Sa e e
	Te s ra



Respondent No: 2 Login: Anonymous

Email: n/a

Responded At: Sep 24, 2021 08:29:37 am **Last Seen:** Sep 24, 2021 08:29:37 am

IP Address: n/a

Q1.	Name	
Q2.	Contact number	
Q3.	Contact email	
Q4.	Your address	
Q5.	Are you having internet issues?	Yes
Q6.	Are you have mobile phone issue/s?	Yes
Q7.	Who is your current mobile phone provider?	Dodo
Q8.	Is this for your business or for private use?	Pr va e
Q9.	What does your service provider charge per month?	\$75
Q10	Q10. Please rate your current telecommunications services (0-poor to 5 exceeds my needs)	
	ome / off ce n erne	2
	Mob e e ephony / n erne	2
	Cus omer suppor serv ces	2

Q11. What are the current barriers or challenges you have for your telecommunication services?

Lvng n he cen re of he Parkes commun y, Is face n erne ssues on a da y bass. W h wo peope n he house on a modera e p an (more han wha we need for he bo h of us), we s have wf n erne drop ou, TV s ream ng serv ces drop ou and s ow mob e speeds usua y resu ng n 1 bar- even hough we res de n he h ghes h n Parkes. Th s has been happen ng more frequen y.

Q12. With reference to the COVID-19 pandemic, how has your usage of digital services (Internet, Streaming Services etc) changed?

We have wf n erne drop ou regularly and with the pandemic forcing myse fill of zoom daily as a leacher and my husband or eleconference as a healith practioner, it is has no been deal. Also we have been a lending Telehealith sessions for my pregnancy (no being able of personally a lending he hospia with COVID resircions) and hese have dropped ou numerous mes, which is really disappointing.

Q13. Do you see your future usage of these services Decreasing decreasing, remaining the same or increasing?

Q14. How do service reliability issues, including outages and natural disasters impact you?

We have a few NBN ou ages n my area- which would no concern me if he n erne acid a y remained consistent after he ou age.

Q15. In your opinion, are the telecommunications services you need in your area accessible and affordable ? What improvements should be made for these services?

My curren serv ce has ac ua y jus had a pr ce ncrease- which is rid culous considering my in erne has become so much poorer over he as few mon hs. I will be in ouch with my provider oday and look a line possibility of signing with a new provider because his siasepincrease for in erne had can leven siream one viewing service without dropping out.

Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required?

Yes here are peny o choose from-s jus such a shame you may have o pay more for a servce has sonssen, because has elecommunica ons company has be er coverage ou here. I kind of reliacion should be consumers.

Q17. Are you aware of your consumer rights when it No comes to telecommunication services?

Q18. If not, how could the Government assist you in understanding and using your consumer rights?

Shor pamph e v a ema

Q19. Is there sufficient public information available No on connection options, data limits and speeds for you to make informed decisions?

Q20. What other information is needed?

In regard o ques on 19, he nforma on s here-however e co prov ders make a rea hasse of nd he breakdown on her webs es. A so, f a e co can see her bandw d h and s s ower and drop-ou s are h gher n a cer a n area among a genera popu a on-hey should ge n con ac (sms,ema) and e consumers know why h s s and what s happening of x. I know I am no he only consumer having h s rouble of a e.

Q21. Are there any other matters that should be considered for regional telecommunications and why are they important?

In Parkes we don have he uxury of vs ng a oca ma or a end ng med ca apponmens. That is why we rely very heaving on on ne shopping eld of some mesige basic needs, especially during the pandemic. I pay a or per month of shave erribe nerne which is really upsering. It is a was eld money for my wifther when I face an outage and have of ho spot from my phone, which also has erribe 4G. My husband and I pay over \$200 per month for unrelabe nerne (including our wift and phone plans) which I fee is a horribe was eld money for a service that can even provide a basic bandwidth and nerne connection, which is much ower han the plants gned up for.

Q22. What type of provider do you have?	NBN f xed w re ess
Q23. Who is your service provider?	Dodo



Login: Email: **Responded At:** Sep 25, 2021 11:33:06 am **Last Seen:** Sep 25, 2021 01:23:07 am

IP Address: 1.129.22.219

Q1. Name	no answered
Q2. Contact number	no answered
Q3. Contact email	no answered
Q4. Your address	no answered
Q5. Are you having internet issues?	Yes
Q6. Are you have mobile phone issue/s?	Yes
Q7. Who is your current mobile phone provider?	Tesra
Q8. Is this for your business or for private use?	Bo h
Q9. What does your service provider charge per month?	200 per mon h for 2x mob e phone dev ces & mob e broadband
Q10. Please rate your current telecommunications se	rvices (0-poor to 5 exceeds my needs)
Q10. Please rate your current telecommunications se	rvices (0-poor to 5 exceeds my needs)
ome / off ce n erne	1
ome / off ce n erne Mob e e ephony / n erne	1 2 3 have for your telecommunication services?
ome / off ce n erne Mob e e ephony / n erne Cus omer suppor serv ces Q11. What are the current barriers or challenges you NBN s on y ava ab e v a sky mus er. There s no un	1 2 3 have for your telecommunication services?
ome / off ce n erne Mob e e ephony / n erne Cus omer suppor serv ces Q11. What are the current barriers or challenges you NBN s on y ava ab e v a sky mus er. There s no un Q12. With reference to the COVID-19 pandemic, how etc) changed?	1 2 3 have for your telecommunication services? m ed p ans ava ab e

Q15.In your opinion, are the telecommunications services you need in your area accessible and affordable ? What improvements should be made for these services?

No. We pay s gn f can y h gher pr ce for mob e broadband o her op ons are m ed & more expens ve

Our serv ces s pa ch & unre ab e a he me. No changes when na ura d sas ers occur

Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required?
W re ess broadband op on for my area wou d be grea
Q17. Are you aware of your consumer rights when it No comes to telecommunication services?
Q18. If not, how could the Government assist you in understanding and using your consumer rights? Unsure
Q19. Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?
Q20. What other information is needed? When NBN s gong o ex end fur her. I ve 19km from he cen re of Parkes & was od I am very so a ed by s aff a NBNco. There are 7 o her houses on our road which s on y 5km ong I don consider ha so a ed.
Q21. Are there any other matters that should be considered for regional telecommunications and why are they important? Upgrad ng nes ou of own.
Q22. What type of provider do you have? no answered
Q23. Who is your service provider? Te s ra



Respondent No: 4 Login: Anonymous

Email: n/a

Responded At: Sep 27, 2021 19:01:09 pm **Last Seen:** Sep 27, 2021 19:01:09 pm

IP Address: n/a

Q1. Name	
Q2. Contact number	
Q3. Contact email	
Q4. Your address	
Q5. Are you having internet issues?	Yes
Q6. Are you have mobile phone issue/s?	Yes
Q7. Who is your current mobile phone provider?	Tesra
Q8. Is this for your business or for private use?	Bo h
Q9. What does your service provider charge per month?	150
Q10.Please rate your current telecommunications serv	vices (0-poor to 5 exceeds my needs)
ome / off ce n erne	i
Mob e e ephony / n erne	1
Cus omer suppor serv ces	1
Q11. What are the current barriers or challenges you have	ave for your telecommunication services?
No serv ce away from house Broadband sa e e unre	ab e, oo expens ve and unsus a nab e ong erm
Q12. With reference to the COVID-19 pandemic, how have etc) changed?	as your usage of digital services (Internet, Streaming Services
Trped	
Q13.Do you see your future usage of these services decreasing, remaining the same or increasing?	Rema n ng he same

Q14. How do service reliability issues, including outages and natural disasters impact you?

Dr v ng from Ba dry o parkes o go grocery shopp ng means no serv ce n he Goobang Na ona park. When I had fa yre I cou d no con ac Nrma or ca for he p. There needs o be ower n Goobang for fre serv ce safe y. A so when so c ose o rad o e escope and more our s s n he area hen needs be er serv ce

Q15. In your opinion, are the telecommunications services you need in your area accessible and affordable? What improvements should be made for these services?

Def n e y no . Needs o be ower ha can be u sed by Ba dry and Tom ng ey res den s. Presen y broadband sa e e on our houses s oo expens ve as has me ered usua s which does no su our fes y e or A rbnb gues s.

Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required?

No we are n so a ed area and o d we are n b ack spo and need o use sa e e, which sino v able for farmers ou on he paddocks or freman fighing fires in he h s.

Q17. Are you aware of your consumer rights when it No comes to telecommunication services?

Q18. If not, how could the Government assist you in understanding and using your consumer rights?

Persona e er or con ac

Q19.Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?

Q20. What other information is needed?

More ransparency and c ar y wha s ava ab e. Mos peop e do no know f ads ava ab e, w re ess or f a ower nearby hey can use. Need unb ased neu ra nforma on. Needs o be uncomp ca ed bas c v sua nfo.

Q21. Are there any other matters that should be considered for regional telecommunications and why are they important?

Focus pu ng e co owers and connec ng he major h ghways n reg ona areas, he p w h h gh f re danger areas and pu owers n Na ona parks. This is where our sm ncrease will be so need to ensure hey are connected and safe so hey re urn or even move to our area.

Q22. What type of provider do you have? Sa e e

Q23. Who is your service provider? Ac v8me skymus er



Respondent No: 5 Login: Anonymous

Email: n/a

No. A f ber connec on s preferred

Responded At: Sep 28, 2021 10:02:45 am **Last Seen:** Sep 28, 2021 10:02:45 am

Q1.	Name	
Q2.	Contact number	
Q3.	Contact email	
Q4.	Your address	
Q5.	Are you having internet issues?	Yes
Q6.	Are you have mobile phone issue/s?	Yes
Q7.	Who is your current mobile phone provider?	Tesra
Q8.	Is this for your business or for private use?	Bo h
Q9.	What does your service provider charge per month?	\$285
Q10	Please rate your current telecommunications servi	ces (0-poor to 5 exceeds my needs)
	ome / off ce n erne	3
	Mob e eephony / n erne	2
	Cus omer suppor serv ces	2
Q11	.What are the current barriers or challenges you ha	ve for your telecommunication services?
	F xed w re ess connec on ha s a ways very s ow and	never a s rong s gna
Q12	. With reference to the COVID-19 pandemic, how has etc) changed?	s your usage of digital services (Internet, Streaming Services
	Increased usage for work, schoo and p easure	
Q13	.Do you see your future usage of these services decreasing, remaining the same or increasing?	Increas ng
	. How do service reliability issues, including outage Our f xed w re ess s gna s a way weak and a ways s ov	2 2
Q15	In your opinion, are the telecommunications services?	ees you need in your area accessible and affordable ? What

Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required?	
F ber, no f xed w re ess	
Q17. Are you aware of your consumer rights when it comes to telecommunication services?	No
Q18. If not, how could the Government assist you in un	
Q19. Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?	No
Q20. What other information is needed? Op ons	
Q21. Are there any other matters that should be consident important? Fiber	dered for regional telecommunications and why are they
Q22. What type of provider do you have?	NBN f xed w re ess
Q23. Who is your service provider?	Tesra



Yes

Respondent No: 6 Login: Anonymous

Email: n/a

Responded At: Sep 28, 2021 13:01:13 pm **Last Seen:** Sep 28, 2021 13:01:13 pm

Q1.	Name	
Q2.	Contact number	no answered
Q3.	Contact email	
Q4.	Your address	no answered
Q5.	Are you having internet issues?	No
Q6.	Are you have mobile phone issue/s?	No
Q7.	Who is your current mobile phone provider?	Tesra
Q8.	Is this for your business or for private use?	Bo h
Q9.	What does your service provider charge per month?	\$55 - phone
Q10	Please rate your current telecommunications servi	ices (0-poor to 5 exceeds my needs)
	ome / off ce n erne	4
	Mob e e ephony / n erne	5
	Cus omer suppor serv ces	4
	.What are the current barriers or challenges you ha	ve for your telecommunication services?
	etc) changed?	s your usage of digital services (Internet, Streaming Services
	WF , so add ona n erne and mob e phone usage	
Q13	Do you see your future usage of these services decreasing, remaining the same or increasing?	Rema n ng he same
	. How do service reliability issues, including outage	s and natural disasters impact you?
Q15	In your opinion, are the telecommunications services?	ces you need in your area accessible and affordable ? What

Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required?		
Yes		
217. Are you aware of your consumer rights when i comes to telecommunication services?	it Yes	
118. If not, how could the Government assist you ir	n understanding and using your consumer rights?	
on connection options, data limits and speeds for you to make informed decisions?		
220. What other information is needed?		
21. Are there any other matters that should be cor important?	nsidered for regional telecommunications and why are they	
Feedback from frends who have come osay n Parkes - oher service providers oher han Teis raishould have be reception in Parkes and he Shire.		
222. What type of provider do you have?	NBN f xed w re ess	
223. Who is your service provider?	Te s ra	



Respondent No: 7 Login: Anonymous

Email: n/a

Responded At: Sep 28, 2021 13:13:44 pm **Last Seen:** Sep 28, 2021 13:13:44 pm

IP Address: n/a

Q1. Name	
Q2. Contact number	
Q3. Contact email	
Q4. Your address	
Q5. Are you having internet issues?	Yes
Q6. Are you have mobile phone issue/s?	Yes
Q7. Who is your current mobile phone provider?	Tesra
Q8. Is this for your business or for private use?	Bo h
Q9. What does your service provider charge per month?	no answered
Q10. Please rate your current telecommunications se	ervices (0-poor to 5 exceeds my needs)
ome / off ce n erne	2
Mob e e ephony / n erne	0
Cus omer suppor serv ces	1

Q11. What are the current barriers or challenges you have for your telecommunication services?

We have no mob e phone range which causes great sires and frusing on for our farming business and the local community. In erne services via Sale e broadband are adequate but no reliable or op ma.

Q12. With reference to the COVID-19 pandemic, how has your usage of digital services (Internet, Streaming Services etc) changed?

There has been an increased usage due oion ne schooling and more business being done on ne.

Q13. Do you see your future usage of these services Increasing decreasing, remaining the same or increasing?

Q14. How do service reliability issues, including outages and natural disasters impact you?

Our and ne s our on y re able communica on oo and s herefore very important of us. The wifican be slowed by weather and raffic which impacts wifical s and in erne access.

Q15. In your opinion, are the telecommunications services you need in your area accessible and affordable? What improvements should be made for these services?

No. The sale eleopions available are no sufficient or run a business from and we keep having old work around he problem. As a farming business, we are unable of use many of he new echnologies available such as GPS, waler monoring and vesiock management systems. To ake advantage of on nerves ock auctions and marker reports we have obeinable house of access hem which is impracted and nefficient. The reliability of he service is poor and impacts on ne meetings and is no always possible of doing nerve banking. The costs of geing small improvements in connectivity is high and seems discriminations or no access have open for boosiers and similar or receive a basic service. The costs prohibility vector many and herefore most cannot ake advantage of any small improvements available.

Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required?

We were completely unsure where o sar when selecting an interned provider. It seemed impossible to get independent, exper advice on what solutions are available. When we have had private companies come to advise us, the was difficut to ascertain the expensive modifications would be worklined by the provider of the p

Q17. Are you aware of your consumer rights when it No comes to telecommunication services?

Q18. If not, how could the Government assist you in understanding and using your consumer rights?

I s very d ff cu o know where o go w h your commun ca on ssues. av ng a cen ra body w h an unders and ng of reg ona ssues wou d be benef ca.

Nο

Q19. Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?

Q20. What other information is needed?

A cear ou ne of which service providers are avaiable in regional areas, what hey are able to offer and the speed and relability of heir service. As a "ayman" is very hard to understand what is out here and I found this information very difficution of nd.

Q21. Are there any other matters that should be considered for regional telecommunications and why are they important?

In Ba dry we are ex reme y concerned a he ack of mob e phone range. We are on he man ranspor corr dor be ween Parkes and Dubbo and have a arge amoun of ranspor rave ng hrough our dsrc. In add on o he rucks, here are a arge number of ourss who use hs corr dor. We are a so very concerned whhe bushfre danger nourdsrc and he mpac of no mob e phone recepion. The mounan ranges nhe Goobang Naiona Park, combined whhe power nessuppynghe Norh Parkes mine ha run hrough pulas a very high fre danger risk. In he even of a fire, he only way or a selhe a arm would be old rive back on he house which was es valuable me. Finally, farming and mining are such big ndusines in Ausira a and major exporters contributing on he economy. I seems so wrong ha we have of ghifor basic elecommunical on services of improve he producively, efficiency and safely of our businesses.

Ne for Sa e e In erne and Te s ra for and ne and mob e phone.



Respondent No: 8 Login: Anonymous

Email: n/a

Responded At: Sep 28, 2021 13:23:40 pm **Last Seen:** Sep 28, 2021 13:23:40 pm

IP Address: n/a

Q1. Name	
Q2. Contact number	
Q3. Contact email	
Q4. Your address	
Q5. Are you having internet issues?	No
Q6. Are you have mobile phone issue/s?	Yes
Q7. Who is your current mobile phone provider?	Vodafone and Te s ra
Q8. Is this for your business or for private use?	Bo h
Q9. What does your service provider charge per month?	\$120
Q10. Please rate your current telecommunications ser	rvices (0-poor to 5 exceeds my needs)
ome / off ce n erne	4
Mob e e ephony / n erne	0
Cus omer suppor serv ces	2
Q11. What are the current barriers or challenges you h	nave for your telecommunication services?
Recep on s errbe a home. Aso errbe anywhere	ous de of own. I work nagrou ure so I ba e recep on ssues a
he me. I run he bus ness so I have many hours necep on.	he car where I could be aking/making calls bull can lidue oil miled

etc) changed?

Q12. With reference to the COVID-19 pandemic, how has your usage of digital services (Internet, Streaming Services

I has ncreased my re ance on n erne . Thankfu y I have been us ng b wave from Parkes and hey have good speeds.

Q13. Do you see your future usage of these services Increasing decreasing, remaining the same or increasing?

Q14. How do service reliability issues, including outages and natural disasters impact you?

Power ou ages effec my ab y o use he n erne

Q15. In your opinion, are the telecommunications services you need in your area accessible and affordable? What improvements should be made for these services?

In erne s access be and affordabe a he home. The mob e phone ne work s no dea and s expens ve for wha I ge

Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required?

Ge me some s ar nk o my mob e phone p ease!

Q17. Are you aware of your consumer rights when it comes to telecommunication services?

Yes

Q18. If not, how could the Government assist you in understanding and using your consumer rights?

I sa d yes.

Q19. Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?

No

Q20. What other information is needed?

A fur range of op ons/prices. I only found our about he local guy from blowave through friends but hey are awesome for rural fixed in ernel. I drove a drone in Israe from the farm house with the other day. Very good speeds

Q21. Are there any other matters that should be considered for regional telecommunications and why are they important?

A mx of commerc a and governmen $\,$ nfras ruc ure (back o he fu ure perhaps) however he governmen should consider $\,$ nves $\,$ ng $\,$ n areas of hgh agricu ura $\,$ produc on ha have $\,$ ow popula on numbers. I $\,$ w $\,$ never make sense for $\,$ private $\,$ companies $\,$ odo ha $\,$.

Q22. What type of provider do you have?	NSW f bre o node or house
Q23. Who is your service provider?	B wave for n erne and hey are grea. Tes ra for mobe da a and hey have an okne work. Vodafone for mobe phone because hey have owers where Tes ra doesn and I can of en cafrom he Tes ra mobe modem when I have no Vodafone service



Respondent No: 9 Login: Anonymous

They would be be er fone could keep and use his Fax.

Email: n/a

Responded At: Sep 28, 2021 15:33:55 pm **Last Seen:** Sep 28, 2021 15:33:55 pm

Q1.	Name	
Q2.	Contact number	
Q3.	Contact email	
Q4.	Your address	
Q5.	Are you having internet issues?	No
Q6.	Are you have mobile phone issue/s?	Yes
Q7.	Who is your current mobile phone provider?	Amays m
Q8.	Is this for your business or for private use?	Pr va e
Q9.	What does your service provider charge per month?	\$40.00
Q10	Please rate your current telecommunications servi	ces (0-poor to 5 exceeds my needs)
	ome / off ce n erne	4
	Mob e eephony / n erne	3
	Cus omer suppor serv ces	2
Q11	.What are the current barriers or challenges you ha	ve for your telecommunication services?
	When I go NBN I was od I coudn have a Fax. and I I	had o rep ace my 3 Land ne phones
Q12	. With reference to the COVID-19 pandemic, how has etc) changed?	s your usage of digital services (Internet, Streaming Services
	I has ncrease dueb o he ockdown.	
Q13	Do you see your future usage of these services decreasing, remaining the same or increasing?	Rema n ng he same
	. How do service reliability issues, including outage	s and natural disasters impact you?
	10.000 € 0.000 (10.000 € 0.00	ces you need in your area accessible and affordable ? What

	rs available to provide the telecommunications services you be you need to identify, choose and access the connectivity
Q17. Are you aware of your consumer rights when it comes to telecommunication services?	No
Q18. If not, how could the Government assist you in und	
Q19. Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?	Yes
Q20. What other information is needed? Connec on op ons, da a m s snd speeds.	
Q21. Are there any other matters that should be consider important? Thank you.	ered for regional telecommunications and why are they
Q22. What type of provider do you have?	NSW f bre o node or house
Q23. Who is your service provider?	Te s ra NBN



Respondent No: 10 Login: Anonymous

Email: n/a

Responded At: Sep 28, 2021 15:37:15 pm **Last Seen:** Sep 28, 2021 15:37:15 pm

IP Address: n/a

Q1.	Name	
Q2.	Contact number	
Q3.	Contact email	
Q4.	Your address	
Q5.	Are you having internet issues?	Yes
Q6.	Are you have mobile phone issue/s?	No
Q7.	Who is your current mobile phone provider?	Tesra
Q8.	Is this for your business or for private use?	Pr va e
Q9.	What does your service provider charge per month?	Too much
Q10). Please rate your current telecommunications serv	ices (0-poor to 5 exceeds my needs)
	ome / off ce n erne	0
	Mob e eephony / n erne	3
	Cus omer suppor serv ces	2
Q11	.What are the current barriers or challenges you ha	ve for your telecommunication services?
	Weak connec on	
	2. With reference to the COVID-19 pandemic, how ha etc) changed? No changed much	s your usage of digital services (Internet, Streaming Services
	B. Do you see your future usage of these services	Pomo n na ha como
QIS	decreasing, remaining the same or increasing?	Rema n ng he same
Q14	H. How do service reliability issues, including outage Frus rang annoy ng	es and natural disasters impact you?
Q15	improvements should be made for these services?	ces you need in your area accessible and affordable ? What

I was promised a fas er service when is gned up for the nbn but that has no been the case

	dors available to provide the telecommunications services you do you need to identify, choose and access the connectivity
I have no dea of o her prov ders or f hey are any go	ood n my area
Q17. Are you aware of your consumer rights when it comes to telecommunication services?	No
Q18. If not, how could the Government assist you in u	understanding and using your consumer rights?
I don know would no unders and prinied maier a j	perhaps a we adver sed face o face nfo sess on
Q19. Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?	No
Q20. What other information is needed? Info for sen ors s mp f ed and dumbed down	
Q21. Are there any other matters that should be cons important? Don know	idered for regional telecommunications and why are they
Q22. What type of provider do you have?	NSW f bre o node or house
Q23. Who is your service provider?	Te s ra



Respondent No: 11 Login: Anonymous

Email: n/a

Responded At: Sep 28, 2021 15:43:31 pm **Last Seen:** Sep 28, 2021 15:43:31 pm

IP Address: n/a

Q1. Name	
Q2. Contact number	
Q3. Contact email	
Q4. Your address	
Q5. Are you having internet issues?	Yes
Q6. Are you have mobile phone issue/s?	Yes
Q7. Who is your current mobile phone provider?	
Q8. Is this for your business or for private use?	Bo h
Q9. What does your service provider charge per month?	\$85
Q10. Please rate your current telecommunications serv	ices (0-poor to 5 exceeds my needs)
ome / off ce n erne	3
Mob e eephony / n erne	4
Cus omer suppor serv ces	2
Q11. What are the current barriers or challenges you ha	ave for your telecommunication services?
S ow a mes, Sa e e mus be over oaded	
Q12. With reference to the COVID-19 pandemic, how ha etc) changed? Borderne has ncreased our da a	s your usage of digital services (Internet, Streaming Services
Q13. Do you see your future usage of these services decreasing, remaining the same or increasing?	Increas ng
Q14. How do service reliability issues, including outage we swap from Sa e e o mob e, we have a arge general	
Q15.In your opinion, are the telecommunications services improvements should be made for these services	ces you need in your area accessible and affordable ? What ?

bo h Sa e e & mob e need up grad ng, a so need w der coverage.

	rs available to provide the telecommunications services you you need to identify, choose and access the connectivity
Q17. Are you aware of your consumer rights when it comes to telecommunication services?	No
Q18. If not, how could the Government assist you in und more nforma on	derstanding and using your consumer rights?
Q19.Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?	No
Q20. What other information is needed? when are hey upgrad ng he sa e e	
Q21. Are there any other matters that should be consider important? be er coverage	ered for regional telecommunications and why are they
Q22. What type of provider do you have?	Sa e e
Q23. Who is your service provider?	borderne & Op us



Login: Email: **Responded At:** Sep 28, 2021 17:14:41 pm **Last Seen:** Sep 28, 2021 07:02:46 am

IP Address: 1.145.12.199

Q1.	Name	
Q2.	Contact number	
Q3.	Contact email	
Q4.	Your address	
Q5.	Are you having internet issues?	Yes
Q6.	Are you have mobile phone issue/s?	Yes
Q7.	Who is your current mobile phone provider?	Tesra
Q8.	Is this for your business or for private use?	Bo h
Q9.	What does your service provider charge per month?	48.00
Q10	Please rate your current telecommunications serv	ices (0-poor to 5 exceeds my needs)
	ome / off ce n erne	2
	Mob e e ephony / n erne	2
	Cus omer suppor serv ces	3
	. What are the current barriers or challenges you ha	
	With reference to the COVID-19 pandemic, how ha	s your usage of digital services (Internet, Streaming Services used excess nerne monhy and very sow-zoom uses a o of
Q13	Do you see your future usage of these services decreasing, remaining the same or increasing?	Increas ng
	. How do service reliability issues, including outage No much	es and natural disasters impact you?

Q15. In your opinion, are the telecommunications services you need in your area accessible and affordable ? What improvements should be made for these services? Un m ed n erne would be good we are on a farm and have of use a mob e device for n erne - oo expensive- no vodaphone serv ce- we have no broadband Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required? No Q17. Are you aware of your consumer rights when it Yes comes to telecommunication services? Q18. If not, how could the Government assist you in understanding and using your consumer rights? Refer o on farm ava ab y of serv ces- e non own res den s are never men oned Q19. Is there sufficient public information available No on connection options, data limits and speeds for you to make informed decisions? Q20. What other information is needed? Ma drop Q21. Are there any other matters that should be considered for regional telecommunications and why are they important? Peop e on farms Q22. What type of provider do you have? no answered Q23. Who is your service provider? Te s ra ne gear por ab e dev ce vodaphone No sa e e no cab es no nbn



Login: Anonymous

Maybe. Loya y o prov ders s no rewarded.

Email: n/a

Responded At: Sep 28, 2021 18:45:00 pm **Last Seen:** Sep 28, 2021 18:45:00 pm

Q1. Name	no answered
Q2. Contact number	no answered
Q3. Contact email	no answered
Q4. Your address	no answered
Q5. Are you having internet issues?	Yes
Q6. Are you have mobile phone issue/s?	No
Q7. Who is your current mobile phone provider?	Tesra
Q8. Is this for your business or for private use?	Pr va e
Q9. What does your service provider charge per month?	no answered
Q10. Please rate your current telecommunications servi	ices (0-poor to 5 exceeds my needs)
ome / off ce n erne	1
Mob e e ephony / n erne	2
Cus omer suppor serv ces	1
Q11. What are the current barriers or challenges you ha	ve for your telecommunication services?
Language of suppor service personne . Time akes of	access and have suppor over he phone.
Q12. With reference to the COVID-19 pandemic, how has etc) changed?	s your usage of digital services (Internet, Streaming Services
Needed more as work ng and Learn ng from home	
Q13. Do you see your future usage of these services decreasing, remaining the same or increasing?	Rema n ng he same
Q14. How do service reliability issues, including outage	s and natural disasters impact you?
	ne phone ne we re y on mob e ower o s ay connec ed
Q15.In your opinion, are the telecommunications services improvements should be made for these services?	ces you need in your area accessible and affordable ? What

Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required?
No sure. Need easy o unders and and comparable information on from a providers. Using the same anguage and forma.
Q17. Are you aware of your consumer rights when it No comes to telecommunication services?
Q18. If not, how could the Government assist you in understanding and using your consumer rights? Pamph e s
Q19. Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?
Q20. What other information is needed? Op ons for oca suppor
Q21. Are there any other matters that should be considered for regional telecommunications and why are they important?
Jus because we are regional doesn into mean we should be pull as . Improving our support and access should be a prior y
Q22. What type of provider do you have? NSW f bre o node or house
Q23. Who is your service provider? Te s ra



Login: Anonymous

Email: n/a

Responded At: Sep 28, 2021 19:04:45 pm **Last Seen:** Sep 28, 2021 19:04:45 pm

Q1.	Name	
Q2.	Contact number	
Q3.	Contact email	
Q4.	Your address	
Q5.	Are you having internet issues?	Yes
Q6.	Are you have mobile phone issue/s?	Yes
Q7.	Who is your current mobile phone provider?	Tesra
Q8.	Is this for your business or for private use?	Pr va e
Q9.	What does your service provider charge per month?	\$300 for 2 mob es
Q10	Please rate your current telecommunications servi	ices (0-poor to 5 exceeds my needs)
	ome / off ce n erne	0
	Mob e e ephony / n erne	0
	Cus omer suppor serv ces	1
Q11	.What are the current barriers or challenges you ha	ve for your telecommunication services?
	Lack of serv ce. Mos y have 1 bar of serv ce. Mak ng poor bandw d h	d ff cu o make ca s and work ng from home near mposs b e w h
Q12	With reference to the COVID-19 pandemic, how has etc) changed?	s your usage of digital services (Internet, Streaming Services
	Increased w h ry ng o work from home	
Q13	Do you see your future usage of these services decreasing, remaining the same or increasing?	Increas ng
Q14	. How do service reliability issues, including outage	es and natural disasters impact you?
	Unab e o work profess ona y w h ca s dropp ng ou ar	nd nab y o a end on ne mee ngs

Q15. In your opinion, are the telecommunications services you need in your area accessible and affordable ? What improvements should be made for these services?			
More owers need o be ava ab e. I had be er phone service when I lived 25km from Parkes. The service in lown is ridiculous			
Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required? No			
Q17. Are you aware of your consumer rights when it comes to telecommunication services?	es		
Q18. If not, how could the Government assist you in unders	standing and using your consumer rights?		
Q19. Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?	es		
Q20. What other information is needed?			
Q21. Are there any other matters that should be considered for regional telecommunications and why are they important? More owers o mprove service			
Q22. What type of provider do you have?	BN f xed w re ess		
Q23. Who is your service provider?	anger ne		



Login: Email: **Responded At:** Sep 28, 2021 19:42:43 pm **Last Seen:** Sep 28, 2021 09:24:57 am

IP Address: 101.191.50.78

Q1. Name			
Q2. Contact number			
Q3. Contact email			
Q4. Your address			
Q5. Are you having inte	ernet issues?	Yes	
Q6. Are you have mobil	e phone issue/s?	Yes	
Q7. Who is your current	t mobile phone provider?	Tesra	
Q8. Is this for your busi	iness or for private use?	Bo h	
Q9. What does your ser month?	vice provider charge per	\$230	
Q10. Please rate your current telecommunications services (0-poor to 5 exceeds my needs)			
ome / off ce n erne		2	
Mob e e ephony / n e	erne	2	
Cus omer suppor ser	v ces	1	

Q11. What are the current barriers or challenges you have for your telecommunication services?

Lack of re able recep on for mobile phones and in ernel - drop ou s, low quality - no sy lines, sialled in ernel, dropped ou phone calls, need lo resiar rou er on a regular basis.

Q12. With reference to the COVID-19 pandemic, how has your usage of digital services (Internet, Streaming Services etc) changed?

I has ncreased s gn f can y w h each ng de very v a zoom, more me a home has resu ed n ncreased use of n erne and v deo ca s o fam y

Q13. Do you see your future usage of these services Increasing decreasing, remaining the same or increasing?

Q14. How do service reliability issues, including outages and natural disasters impact you?

Our n erne genera y s ops work ng

Q15. In your opinion, are the telecommunications services you need in your area accessible and affordable ? What improvements should be made for these services? No. Cons s en re ab e mob e and n erne serv ces 24/7 are required o ensure safe y and con ac ab y of peop e I n rura areas such as ours par cu ar y as we ge o der. Q16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required? No. My unders and ng s ha Te s ra s he on y prov der who serv ces our oca on, so here s no cho ce. Q17. Are you aware of your consumer rights when it Yes comes to telecommunication services? Q18. If not, how could the Government assist you in understanding and using your consumer rights? N/a Q19. Is there sufficient public information available Yes on connection options, data limits and speeds for you to make informed decisions? Q20. What other information is needed? Independen Compar sons nforma on abou differen providers Q21. Are there any other matters that should be considered for regional telecommunications and why are they important? S ra eg c deve opmen of exchanges ha are equipped with adequate in ness o provide mobile and in erne services in othe fu ure Q22. What type of provider do you have? NBN f xed w re ess Q23. Who is your service provider? Te s ra



Respondent No: 16 Login: Anonymous

Email: n/a

Responded At: Sep 28, 2021 20:08:49 pm **Last Seen:** Sep 28, 2021 20:08:49 pm

IP Address: n/a

Q1.	Name			
Q2.	Contact number			
Q3.	Contact email			
Q4.	Your address			
Q5.	Are you having internet issues?	Yes		
Q6.	Are you have mobile phone issue/s?	Yes		
Q7.	Who is your current mobile phone provider?	Tesra		
Q8.	Is this for your business or for private use?	no answered		
Q9.	What does your service provider charge per month?	80		
Q10	Q10.Please rate your current telecommunications services (0-poor to 5 exceeds my needs)			
	ome / off ce n erne	2		
	Mob e eephony / n erne	3		
	Cus omer suppor serv ces	2		
Q11	Q11. What are the current barriers or challenges you have for your telecommunication services?			
	Speed and re ab y			
Q12. With reference to the COVID-19 pandemic, how has your usage of digital services (Internet, Streaming Services etc) changed?				
	Yes, I work from home and hav ng he k ds home school	and sharing he imited in erne was difficult.		
Q13	3. Do you see your future usage of these services decreasing, remaining the same or increasing?	Rema n ng he same		
Q14	Q14. How do service reliability issues, including outages and natural disasters impact you?			
	uge mpac . Re recen y had an ou age for near y 8 weeks as a resu of mu p e cance ed appon men s.			
Q15.In your opinion, are the telecommunications services you need in your area accessible and affordable ? What improvements should be made for these services?				

No. The nfras ruc ure needs mproving, buildue on heim ediusers is no considered high prior y.

16. Are there appropriate services, options and vendors available to provide the telecommunications services you require? What additional information / support do you need to identify, choose and access the connectivity options you required? Prov ders are adequa e bu he nfras ruc ure s no.			
Q17. Are you aware of your consumer rights when it comes to telecommunication services?	Yes		
Q18. If not, how could the Government assist you in und	derstanding and using your consumer rights?		
Q19.Is there sufficient public information available on connection options, data limits and speeds for you to make informed decisions?	Yes		
Q20. What other information is needed? No h ng			
Q21. Are there any other matters that should be considered for regional telecommunications and why are they important?			
Infras ruc ure n genera needs upda ng bo h mob e ar are no cons dered h gh pr or y.	nd fxed n erne services. The smaller popula on lends o mean we		
Q22. What type of provider do you have?	NSW f bre o node or house		
Q23. Who is your service provider?	Tesra		



Login: Anonymous

Email: n/a

Responded At: Sep 28, 2021 22:03:48 pm **Last Seen:** Sep 28, 2021 22:03:48 pm

IP Address: n/a

Q1. Name	no answered		
Q2. Contact number	no answered		
Q3. Contact email	no answered		
Q4. Your address	no answered		
Q5. Are you having internet issues?	Yes		
Q6. Are you have mobile phone issue/s?	No		
Q7. Who is your current mobile phone provider?	Tesra		
Q8. Is this for your business or for private use?	Pr va e		
Q9. What does your service provider charge per month?	\$110 for home phone and n erne , \$50per mob e serv ce.		
Q10. Please rate your current telecommunications serv	vices (0-poor to 5 exceeds my needs)		
ome / off ce n erne	2		
Mob e e ephony / n erne	4		
Cus omer suppor serv ces	0		
Q11. What are the current barriers or challenges you h	ave for your telecommunication services?		
pay ng h gh pr ces for very s ow, pa chy n erne			
Q12. With reference to the COVID-19 pandemic, how has your usage of digital services (Internet, Streaming Services etc) changed?			
usage has skyrocke ed bu he n erne has been so bogged down and s ow			
Q13. Do you see your future usage of these services decreasing, remaining the same or increasing?			

Q14. How do service reliability issues, including outages and natural disasters impact you?

When neme usage shgh durng sorms ec becomes sow and drops ou a o which means we have rouble accessing information especially since 95.5 RokFM (ocaliradio salon) drops ou as soon as irans.

improvements should be made for these se	s services you need in your area accessible and affordable ? What ervices?	
Palling And Control of the Control o	v ded. Make NBN fas er and more re ab e, maybe ge rd of he od copper a coun ry own whereas he c y s ckers ge op c cab e o he r houses.	
10 101 A 0 10	d vendors available to provide the telecommunications services you oport do you need to identify, choose and access the connectivity	
217. Are you aware of your consumer rights who comes to telecommunication services?	en it No	
218. If not, how could the Government assist yo	ou in understanding and using your consumer rights?	
on connection options, data limits and spe- for you to make informed decisions?		
020. What other information is needed? Don' know		
221. Are there any other matters that should be important?	considered for regional telecommunications and why are they	
ge rd of he s gna b ack spo s be ween coun ry owns. C y suburbs have fu coverage, s op rea ng coun ry fo k as second c ass c zens, our axes are jus as mpor an as c y fo k.		
Q22. What type of provider do you have?	NSW f bre o node or house	