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The Hon Luke Hartsuyker
2021 Regional Telecommunications Review Chair
Department of Infrastructure, Transport,
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2021 Regional Telecommunications Review

Goondiwindi Regional Council resolved at its Ordinary Meeting held 22 September to endorse a Goondiwindi Region Submission to the Regional Telecommunications Review 2021. Please find attached the formal submission.

We thank you for the opportunity to outline the connectivity issues in the Goondiwindi Region and to suggest solutions for the Committee's consideration.

Yours faithfully

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Goondiwindi Regional Council

INTRODUCTION

Goondiwindi Regional Council is home to 11,000 people and covers an area of 19,258 square kilometres of Queensland, along the state's border with New South Wales. Goondiwindi region is potentially one of the most diverse rural production and value-adding areas in Australia. With agriculture as the region's main industry, the gross regional product is $731 million. As the gateway to Queensland, 700 kilometres of federal and state highways criss-cross the region allowing for travel into all corners of the state.

Council conducted telecommunications research throughout the region with a qualitative approach, involving small group meetings and invited those residents who could not make the meetings to make contact through email or phone to contribute to the research. The responses were consistent across the region and formulate this submission. Telstra is the major provider of services in the Goondiwindi region.

Council's research outlined the lack of faith our residents have in the adequate and timely advancement of access and reliability of telecommunications. In contradiction of the belief of the major providers, landlines remain the primary baseline means of communication in most rural areas.

ISSUES WITH TELECOMMUNICATIONS ACROSS THE GOONDIWINDI REGION

Our region is dissected by kilometres of highway that are largely not adequately covered by existing services. Sometimes accidents cannot be reported from the scene, and emergency services cannot provide timely remote assistance, and on several occasions this has resulted in a poorer response than those in a connected area.

The nature of farm work can be isolating, but it is exacerbated by the lack of workplace telecommunications connection, whether it be by mobile range or broadband services. Safety is a major concern for farming businesses and in many locations, farmers are unable to rely on existing networks to access assistance.

On-farm security cameras, and heat and motion sensors are reliant on connectivity and as such are not being well utilised in our region despite multiple farmers and other businesses raising their concerns over security and safety. Rural crime is an emerging issue that is often best tackled with technology, however, this is not a practical option for people in areas without connection.

Farm biosecurity is an ongoing threat to the viability of agriculture. QR codes for traceability cannot be relied upon without connectivity. In the context of food and fibre, safety consumers are increasingly demanding product traceability.

In times of natural disasters such as flood and fire, communication is the key to minimise the impact to people and property.

While telehealth has been embraced during the COVID-19 pandemic, providing the opportunity for people in rural areas to access medical care, virtual care initiatives are still limited to those who can access reliable telecommunications.

Home schooling during the COVID-19 pandemic has shown the disadvantage many students in the Goondiwindi region have with limited, and in some cases, no access to reliable internet services.

The frustration of the lack of access and the unreliability of telecommunications services is a catalyst for mental health issues. Repeatedly our residents express frustration with their access to telecommunications holding them back from living and operating businesses in the 21st century.

There is a real concern there will be less coverage in June 2024 when the Telstra (main telecommunications provider in our region) 3G network is switched off. Voice and text services are still vitally important, particularly for day-to-day operations of many businesses, and social interactions.

The townships of Goondiwindi, Inglewood and Texas provide free CBD WiFi and public access computers in the libraries. Council staff have noted the high number of users from out of town utilising these internet services simply to pay accounts, upload data for upcoming online sales, complete government and other forms that have timeout properties, and online learning.

Network capacities are often reached during periods of high usage such as online stock auctions when farmers are endeavouring to access the one tower at the same time. For some people, very early mornings are the only time to use the internet, whether it be for business or otherwise, as the networks are not as congested.

The Goondiwindi Region is the epicentre of innovation in agriculture in Australia, and Australia is a global leader in agriculture. Controlled traffic guidance (RTK) systems were pioneered in this region, as was zero-till farming, the world's widest boom spray, and camera sprayers for detecting weeds in a fallow environment. Soil sensor technology and the largest private weather station network was developed here, and this same company is moving down the path of full farm automation and is building an international LoRaWAN network. Additionally John Deere conduct regular trials in the region before adopting new technology and sending it into the world market.

The irony is that many farming businesses cannot access the technology needed to actually utilise the on-farm productivity and efficiencies developed locally. As an example, the high resolution images required to ensure that paddock weeds are located and linked to a GPS position by drones when mapping a paddock creates a large data file that the current communications system cannot handle in a timely fashion. Similarly a lack of effective mobile data makes remote collection of real time information, trouble shooting and diagnosis on farming machinery difficult, ultimately holding back the region from increased productivity. With the next wave of innovation expected to happen within the AgTech space,[1] connectivity in the Goondiwindi Region, and indeed all of regional Australia, will be more important than ever so that Australia can capitalise on this potential.

Businesses are being required to think and act differently to deal with the labour shortages across our region, and indeed all of regional Australia. The inequity for access is inhibiting attraction and retention of staff in our region. There are numerous technologies that can assist in making many time saving tasks automated, if only there was access through our telecommunications networks.

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[1] Agriculture 4.0, 2021

Research by the Regional Australia Institute (RAI) shows one in five Australians living in capital cities are considering a move to regional Australia.[2] The RAI outlines one of the barriers for a move is access to reliable broadband connectivity.[3]

In most cases, access is benefitted by individuals investing heavily in infrastructure to access mobile data and broadband services. People in our region – in rural and urban localities - have spent considerable funds on boosters in vehicles, homes and offices and in some cases, erecting their own towers and creating internal networks. There is an inequity between those who can afford such infrastructure and the individuals and smaller farmers who are impeded by the costs of this investment.

Economic modelling conducted through the Precision to Decision Project[4] indicates that digital technologies for agriculture could unlock $20.3 billion in gross value of agriculture production. Australia is seeking to have agriculture as a $100 billion industry by 2030. To achieve these goals, Australia needs to provide connectivity in all agricultural regions, including ours. A lack of access to mobile and internet telecommunications infrastructure is seen as a major impediment to the adoption of digital agriculture systems.

As the world becomes more digitally dependant, agriculture advancement will be dependent on proper connectivity as an explosion of data is expected by digital technologies, coupled with advanced analytics that will push the boundaries of performance. The lack of capacity and reliability and access brings concerns for a lack of readiness for Australia to cope.

RECOMMENDED SOLUTIONS

1. The Government needs to ensure progress on **coverage of non-commercially viable mobile black spots** as a priority in regional digital infrastructure program funding to ensure accessibility for all Australians.

2. We recommend the **Government be the lead agency in establishing where the towers are located** and allowing all service providers to access the infrastructure and move beyond co-funding models for infrastructure and the federal government lead the direction of infrastructure projects and connect the checkerboard of mobile coverage across regional and remote Australia.

3. We recommend the Government legislate to require **telecommunication operators to provide access for competitors to their mobile infrastructure in regional areas to enable roaming**. This is to support people and businesses in regional communities and improve safety for tourists travelling in regional areas.

4. Connected to the Universal Service Guarantee, a **minimum repair time** should be established to ensure access to landlines and internet connectivity. This minimum repair time guarantee should extend to whatever method (satellite, landline, microwave, wireless broadband) is the primary connection point for a community.

5. We recommend that priority be given to **forward planning for the use of 5G services in regional areas and the impact of the Internet of Things (IoT) for regional communities.** Infrastructure needs to be designed to support long distance coverage for regional agriculture

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[2] Regional Australia Institute, 2020
[3] Regional Australia Institute, 2020
[4] KPMG, 2018

to enhance interconnectivity between farmers, livestock and machinery to enhance modern farming and make best use of emergent technologies.

6. We recommend that government **seek guarantees from service providers that no person will be worse off under the move to the 4G network**, and as a minimum, it is to replace the existing 3G coverage area.

References

KPMG, Talking 2030 – Growing agriculture into a $100 billion industry, 2018

Regional Australia Institute, RAI National Awareness Campaign Market Research, 2020

Agriculture 4.0, Australian Trade and Investment Commission, 2021