1. **What are the main barriers to people in regional communities increasing their use of digital technologies and possible solutions for overcoming these barriers?**

There is a massive digital divide between the access to digital technologies in the regional communities in comparison to the city!!

The main barriers for people in regional communities are two-fold? The first being the "Cost vs Data" issue. The current internet access is probably sufficient for residential users (if you don't want to stream Netflix or the like) but is totally insufficient for existing businesses to compete with city markets. To enable businesses to have sufficient data upload and download, the cost then become prohibitive and out of step with the city prices. We are yet to see an unlimited download available to anyone in the "Sky Muster" service area!!!

The other barrier is coverage. In regional communities who can only use the Sky Muster service, it is very limited to the type of business that can utilise it. The major "small" business in rural Western Australia is Wheat and Sheep farming. The lack of digital footprint does not allow farmers to run their business on the move. The ability for Farmers to run their business in the paddock would have wide ranging benefits both economically and for time management.

The solution? For the 3% or so of the population that cannot access the fixed or mobile wireless NBN, we believe you should ditch the Sky Muster service and concentrate on increasing the Mobile phone digital footprint and increase existing services to 4/5G services which would allow the rural and remote communities to conduct their business on the move. Farmers do not need internet in their homes per say, they require the ability to check markets while in the paddock, on the harvester and create new technologies with GIS mapping and drone capabilities.

2. **How are people in regional communities currently using their broadband service and how might they increase the benefits of using this technology?**

People in Regional communities are limited to how they currently use their broadband service as it is too restrictive. The Sky Muster service is fixed and does not allow for any flexibility. It is our opinion that the State and Federal Governments should concentrate on increasing the Mobile phone digital footprint and increase existing services to 4/5G services which would allow the rural and remote communities to conduct their business on the move. Too many areas have blackspots and correcting these issues should be first and foremost on the Governments agenda.

Also, creating a technology that allows a cheap/smaller version of a Mobile Phone tower to be installed at the Farmers shed, using their current power supply (possibly at the farmers cost) which would supply a footprint over their immediate farm. Thinking outside the square is the only way to rectify the digital divide between the city and remote areas.

3. **What data-intensive activities are occurring in regional, rural and remote Australia? What digital technologies are needed for these?**

We are concerned that data intensive activities such as school of the air, home schooling practices are restricted due to the insufficient data required for such practices. Our Local Government for instance cannot utilise Cloud technologies as we do not have sufficient upload/download capacity. This put added cost and security pressures on our Council. It also limits the type of business we can attract to our communities. As we have cheap office cost, business would like to set up in the rural setting but struggle because of the lack of data available, such as website design companies and remote access businesses.

4. **How can regional businesses better utilise digital technologies to maximise economic benefits?**

The Sky Muster technology limits the use of technologies in its current form. It is our opinion that the State and Federal Governments should concentrate on increasing the Mobile phone digital footprint and increase existing services to 4/5G services which would allow the rural and remote communities to conduct their business on the move. Too many areas have blackspots and correcting these issues should be first and foremost on the Governments agenda. This would allow remote communities to maximise the benefits of digital technologies.

5. **What can be done to improve access to and uptake of telecommunications services in remote Indigenous communities?**

N/A

6. **Are there practical examples of how communications services can improve the well-being of people in remote Indigenous communities?**

N/A

7. **What skills do people need to get the most from their digital technologies, and where can they learn these skills?**

At the moment the best place to get information on digital technologies is via the Western Australian Community Resource Centre (CRC's) network.

8. **Have you had ongoing issues affecting your satellite or fixed wireless broadband service? If so, how have you overcome these issues?**

In the initial uptake of the Sky Muster program, our Shire Council continually was running out of data after the first 20 days of the month, which was totally unacceptable to run a business. We were working with shaped speeds when trying to perform end on month transactions and balancing. We currently have paid an exorbitant amount to get sufficient data to operate our Shire, but still not enough to use Cloud technologies.

On top of this our local fixed telephone exchange was continually faulty which meant we had no communication access for long periods. Telstra, even after several request would not upgrade our telephone exchange as we couldn't even get an ADSL connection, and still don't because the economic return for Telstra was not viable.

9. **If you are in an area with access to the Sky Muster satellite service and you have not taken it up, why not?**

If there was a better service, we would cancel our Sky Muster service.

10. **What economic or social indicators could be used to guide investment to further improve mobile coverage?**

We have recently had two mobile phone towers installed at opposite extremes of our Shire which we are grateful for under the Mobile Blackspot program. The issue we have is that they were installed at sites which were cost effective (existing Telstra Exchanges), but did not maximise the local topography and are limited by their coverage. Contact with the local Shire Council would have gained the local knowledge that would have allowed them to be placed in the most advantageous sites to maximise coverage.

11. Is information readily available regarding how to use devices to improve mobile reception in areas with poor coverage? E.g. information about external antenna equipment?

N/A

12. What emerging digital services will be of most benefit to regional businesses and what are the data needs of these services?

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13. What broadband services are people using other than those available through the NBN?

An example of bureaucracy gone wrong is evident in Westonia (WA), back in 2009 when a local Gold Mine started operation in Westonia, they started installing the necessary infrastructure to commence operation which included a fibre optic cable from Carrabin (Great Eastern Highway) to the mine site. This Fibre optic cable currently goes through the Westonia Townsite, en route to the mine, only two (2) kilometres north of town. After installation, Telstra took over the infrastructure but would not allow the Westonia townsite to access the fibre as any upgrades to the exchange would not deliver a "return on investment". This is would have given the Westonia community access to broadband internet. Instead we had to wait for Sky muster to launch to receive internet faster than dial up!!!!

We can't dollars and cent be cast aside in cases such as these, and I'm sure we are not the only instance.

14. How can more competition be encouraged in the provision of broadband services in regional Australia?

The solution is simple……… increased coverage will increase competition!!!!! Increasing the digital footprint in the mobile phone technology will increase competition and bring down costs.

But the most important piece of the puzzle is allowing mobile phone towers to be accessed by all networks. We currently have Vodaphone and Optus towers in our region that would close the mobile blackspot but can't be accessed. Generally only City folk have Vodaphone and Optus sims which is great when they travel to the regional areas, but this technology could be better utilised by allowing all providers to use the towers.