



# SHAPING THE FUTURE OF BUSINESS TELECOMMUNICATIONS

Review of Telecommunications and Internet  
Usage and Futures for King Island

Thursday 13<sup>th</sup> June 2019



# SHAPING THE FUTURE OF BUSINESS TELECOMMUNICATIONS ON KING ISLAND

## KEY QUESTIONS

- Why have telecommunications, particularly broadband internet services, become important to business and to the community?
- What services are available on King Island today, and how do they compare with the rest of Australia ?
- What future public services are likely to come to King Island and what will NBN bring ?
- What are the likely problems/gaps with current services and what options exist to remedy them ?
- What are the objectives of this June 2019 information gathering and review project ? How can the community assist ?

## WHY IS BROADBAND INTERNET NOW VERY IMPORTANT FOR ECONOMIC DEVELOPMENT?

- Broadband internet technologies provide significantly cheaper conventional telecommunications services (eg voice, messaging, video, even fax...)
- Broadband technology enables many more people to connect with applications and services and each other through many more devices at decreasing cost
- Broadband enables greater competition in supply of services to you, and allows you to compete equally in broader markets
- Broadband can support services that used to be built on bespoke infrastructure at low and decreasing cost (eg security, monitoring and control of equipment, entertainment, government and business services, navigation, etc)
- Broadband enables completely new ways of working, marketing and conducting business, education or service delivery – at lower costs
- Not having equal access to broadband means you don't have equal access to the cost and efficiency benefits that broadband technology can enable

# WHAT SERVICES ARE AVAILABLE ON KING ISLAND TODAY ?

- Basic telephone
- Mobile – 4GX (green), 3G (pink), 3G with antenna (orange)
- ADSL in Currie and Grassy
- NBN SkyMuster



As far as Access Speed is concerned this means relatively few people have available services >10 Mbit/s (ie only NBN and 4GX data users in good locations)

But Actual Speed (“committed rate”) is determined by how many users are sharing bottleneck resources at the same time and the strange way that TCP/IP works.

Actual Speed can be very low ....

# BENCHMARKING MOBILE TELECOMMUNICATIONS

- 4G is available to 80% of mobile users in Australia. Whilst the theoretical max speed of 4G is 100 Mbit/s – the average speed in Australia in 2018 was 33 Mbit/s. Telstra 4GX works as 2 – 75 Mbit/s, and 4G at 2 – 50 Mbit/s, 3G speeds are less than 10 Mbit/s.
- 5G (being introduced now) is expected to be taken up by 15% of Australians by end 2020 and has a theoretical max speed of 1,000 Mbit/s.
- 5G will almost certainly be faster than NBN (FTTP) but mobile services have contention between the user and the network which means Actual Speed will be less than Access Speed.

# NBN

- NBN Skymuster is a residential product with access speeds of up to 25 Mbits (down) and 5 Mbit/s (up). In practical use the achieved speeds are much lower – and the reliability/availability isn't as high as other services
- NBN Skymuster will release a business grade product in September 2019. Cost is unknown at this stage, but the reliability and the committed rates will be much higher.
- Other NBN products are:
  - Fibre to the Premises (FTTP)
  - Fibre to the Network (FTTN)
  - Fibre to the Curb (FTTC)
  - Fibre over HFC (HFC)
  - Fixed Wireless
- Private LTE

# RELEVANT DEVELOPMENTS

- Internet Of Things (IoT)
- Cloud Computing
- Australian Farming Networks (eg SmartFarmNet)
- Health Networks
- Education

## LIKELY PROBLEMS AND GAPS IMPACTING KING ISLAND

- User Access includes availability of fixed connections between users and the network, or for wireless/mobile it means contention of users accessing the same network
- Trunking and Capacity within King Island includes lack of capacity between locations in King Island (either wireless or fixed)
- Access to Australian National Network which means the availability of capacity between King Island and the rest of Australia
- Availability of Network Services which means non availability of certain services at all (eg NBN Fixed Wireless, 4G universally, 5G)



# REVIEW

- Review the previous 2015 Economic Impact Analysis – update the information contained in that report, and update information on needs of users and assess available services
- Discussions with King Island Council and Key Users
- Review and financially model available solutions and options for improving telecommunications services and economic impact outcomes.

# QUESTIONS

- Please outline where you are located and what your business or organisation does.
- Please explain how you use telecommunications and internet services in your business.
- Do the services you have available today meet your needs ? If they don't, please elaborate on what the issues are and what difficulties or increased business costs arise ?
- If you had the services available that you believe you need at an acceptable price, what impact would that have on your business ? (eg economic, service delivery, efficiency)

THANK YOU



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