# Mobile Coverage Programme Discussion Paper Submission Cover Sheet

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This cover sheet should be attached to submissions made to the Department of Communications in relation to the Mobile Coverage Programme Discussion Paper.			
Contact Details			
Name of respondent:	Phil King, Director Infrastructure Services		
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Website (if applicable):	www.lachlan.nsw.gov.au		
Date:	28 February 2014		
specifically requested, and acconsidered sufficient confidered Respondents lodging a submitreated as confidential inform Communications' website. Su Despite a submission being icauthorised or required by law Do you want all or parts of the	ts, or parts thereof, will be treated as non-confidential information unless ceptable reasons should accompany each request. Email disclaimers will not be		

If the submission contains personal information of any third party individual, indicate on this Submission Cover Sheet if that third party individual has not consented to the publication of his or her personal information:

#### **Submission Instructions**

Submissions are to be made by 5:00pm (AEST) Friday 28 February 2014.

Where possible, submissions should be lodged electronically, preferably in Microsoft Word or other text-based formats via the email address <a href="mailto:mobilecoverage@communications.gov.au">mobilecoverage@communications.gov.au</a>

Alternatively, submissions can be sent to the postal address below (to arrive by the due date):

The Manager Mobile Coverage Programme Department of Communications GPO Box 2154 CANBERRA ACT 2615

All submissions lodged will be acknowledged by the Department of Communications by email (or by letter if no email is provided). Respondents lodging a submission who do not receive acknowledgement of their submission should contact the Department. Submissions which are not acknowledged by the Department as being received may not be considered. Respondents should be aware that emails greater than 10Mb may not be successfully delivered.



28 February 2014

Contact Person: Phil King

The Manager
Mobile Coverage Programme
Department of Communications
GPO Box 2154
CANBERRA ACT 2615

Dear Sir/Madam

#### SUBMISSION - DISCUSSION PAPER - MOBILE COVERAGE PROGRAMME

Please find attached the submission to the Discussion Paper for the Mobile Coverage Programme from Lachlan Shire Council.

This submission provides an overview of Lachlan Local Government Area (LGA) and a brief discussion of the current mobile phone coverage.

The issue of mobile phone coverage is extremely important to the communities of Lachlan LGA. Currently within the Lachlan LGA, mobile phone coverage is centred around the main population bases of Condobolin, Lake Cargelligo and Tottenham. There is a distinct issue with the capacity of these existing networks to cater for the ever increasing demand for service. Due to the tendency for Australia's three national mobile network operators (MNOs) to structure their network around population and associated profitability, there becomes a serviceability issue for regional and remote users.

Council applauds the Coalition Government in keeping their "election commitment to invest \$100 million to improve mobile phone coverage in outer metropolitan, regional and remote communities around Australia." It is important that Western NSW is given an equitable opportunity for the improvement of the mobile coverage network, and that the programme is run in an acceptable manner that promotes value for money, but also supports critical economic activity that is essential to Australia including and not limited to agribusiness, transport and mining.



An additional and important benefit that will result from the improvement of the mobile coverage network is the ability to communicate during times of duress. Unfortunately natural disasters are all too common in the Lachlan LGA. "Lives can depend upon accessing mobile phone networks in emergencies, so expanding mobile phone coverage has clear benefits to public safety". "

Council looks forward to future opportunities for consultation, and should there be any questions regarding the content of this submission please contact me on (02) 6895 1900

Yours faithfully

Phil King

**DIRECTOR INFRASTRUCTURE SERVICES** 

i, ii Media Release Mark Coulton 17 December 2013 "First Step on \$100million regional mobile coverage programme"



# Lachlan Shire Council

SUBMISSION

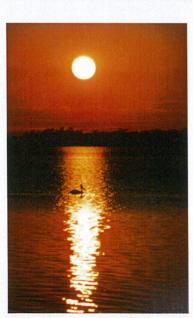
DISCUSSION PAPER

MOBILE PHONE COVERAGE

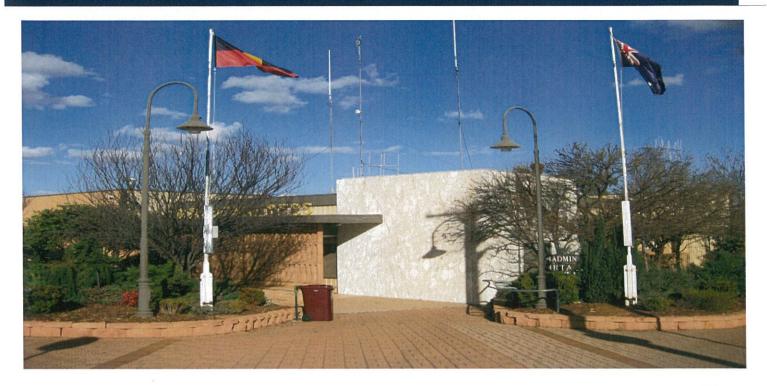
February 2014











# **Contact Details**

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Mayor	Councillor Des Manwaring
General Manager	Liz Collyer

# Brief Details

Total Population – Council area	6457
Population – Urban	5100 (est.)
Population – Rural	1357 (est.)
Council area (sq.km)	14,973 sq. Km.
No. of Staff	132 FTE's
Value of Assets	\$198 M

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### WHO WE ARE AND WHERE WE ARE

Lachlan Shire Council is geographically *The Heart of NSW*. Located in the state's Central West, the largest town in the Shire, Condobolin is located 560km west from the states capital Sydney. The Shire covers an area of 15,000 square kilometres with the main towns and villages being:

- Condobolin
- Lake Cargelligo
- Tottenham
- Tullibigeal
- Burcher
- Derriwong
- Albert
- Fifield.

Lachlan is home to almost 7,000 residents. It is positioned in Wiradjuri Country with over 16% of the Shire's total population identifying as Indigenous in the 2011 Census.

The Shire is the home to many traditional farming cultures and is one of the largest grain producing areas of NSW. It is a rich agricultural area and in addition to grain its significance needs to be acknowledged in the areas of sheep, wool, beef and cotton.

Lachlan Shire Council manages the largest road network of any local council in the entire state, responsible for maintaining a massive 4,460 kilometres of roads.

The Lachlan River flows through the Shire and it is this area that was the inspiration for the great Australian literary prose: 'Clancy of the Overflow'.

In more recent times the Shire has made its mark in the discourse of popular culture with the runner up of the 2003 Australian Idol Series Shannon Noll being a proud Lachlander originally from Tullibigeal then Condobolin and the runner up of the 2012 The X Factor Jason Owen who was born and bred in Albert.



### CURRENT MOBILE PHONE USAGE

#### Condobolin (Telstra & Optus)

Condobolin currently has good mobile coverage for approximately 20km radius around the township for voice, and typical data download speed between 1.1 to 20Mbps. Outside of this 20km radius the mobile phone coverage only extends in an easterly direction towards Parkes, along the Henry Parkes Way and this can be patchy at various locations along this road. The capacity of the mobile service in Condoblin is regularly exceeded with the common experience of phone calls to mobile phones going directly to voicemail when the phone is switched on and not receiving a call. This has been known to occur for emergency services volunteers from the Rural Fire Service, NSW Fire and Rescue and SES.

### Lake Cargelligo (Telstra & Optus)

Lake Cargelligo is reported to have good mobile coverage for approximately a 35km radius around the township for voice, according to the Telstra Network Coverage website, although this is not found to be the case for local residents who anecdotally speak of difficulties in obtaining mobile coverage once they have left the urban limits of the township. When it comes to data there is a small radius of approximately 5km around the town center which is reported to have typical data download speed between 1.1 to 20Mbps according to the same website. Although again anecdotally this does not reflect the experience of residents on a day to day basis.

Lake Cargelligo by its nature is a popular destination for recreational campers and tourists who wish to make the most of lake and the proliferation of free camping areas around the Lake. On any given long weekend and holiday period the population of the town can be doubled with both day visitors and also those staying for a weekend for water skiing, fishing, sailing and bird watching.

## Tottenham (Telstra)

Tottenham currently has good mobile coverage for approximately 15km radius around the township for voice, and typical data download speed between 1.1 to 20Mbps. Outside of this 15km radius the mobile phone coverage ceases to exist. According to the Optus mobile phone coverage website Tottenham has been marked for future 3G coverage

## Tullibigeal (Telstra)

Tullibigeal currently has mobile coverage for approximately 10km radius around the township for voice, and typical data download speed between 550 kbps to 8 Mbps. Outside of this 10km radius the mobile phone coverage is suggested to extend to the west, although this is not the experience of those living in the rural areas surrounding Tullibigeal. According to the Optus mobile phone coverage website Tullibigeal will only receive mobile service coverage on the Optus network with an external aerial.

### **Burcher (Black Spot)**

Burcher is currently known locally as a mobile phone black spot. While the Telstra Network Coverage website reports that service is available, this is not the experience for those who live in Burcher and surrounds. According to the Optus mobile phone coverage website Burcher will only receive mobile service coverage on the Optus network with an external aerial.

### Derriwong (Black Spot)

Derriwong is currently known locally as a mobile phone black spot. While the Telstra Network Coverage website reports that service is available, this is not the experience for those who live in Derriwong. Those who live in the surrounds may be able to make the most of the proximity to the Henry Parkes Way to receive some mobile phone service, but it is expected that this will require an external aerial to be a strong dependable serevice. According to the Optus mobile phone coverage website Derriwong is on the edge of the service area, and is likely to only receive mobile service coverage on the Optus network with an external aerial.

## Fifield (Black Spot)

Fifield is currently known locally as a mobile phone black spot. According to the Telstra Network Coverage website Fifield is on the edge of the service area, and is likely to only receive mobile service coverage with an external aerial. According to the Optus mobile phone coverage website Derriwong is marginal, and likely to only receive mobile service coverage on the Optus network with an external aerial.

## Albert (Black Spot

Albert is currently known locally as a mobile phone black spot. According to both the Telstra Network Coverage website and the Optus mobile phone coverage website no mobile phone service can be obtained in Albert.









#### **Emergency Alert**

Following the Black Saturday bushfires of 7 February 2009, a number of research reports and government led initiatives on community safety were developed. These include the Council of Australian Governments agreement to take immediate steps to enhance the country's emergency management arrangements through the development of a telephone-based emergency warning system subsequently known as Emergency Alert, which became operational on 1 December 2009.

It is understood that these messages are also delivered to landlines and that the advice regarding Emergency Alert is that people should not be relying solely on a mobile telephone to receive this messages. Although the reality for Lachlan LGA is that the majority of the workforce is working outdoors, without mobile phone service and with limited access to media outlets to enable emergency alerts to be received.

#### **Natural Disasters**

The Lachlan Shire has unfortunately had its fair share of natural disasters in recent years with a summary contained in the table below for the last 7 years.

Date	Category	
9 January 2013	Bushfire	
February/March 2012	Floods	
November 2011	Floods	
March 2011	Storm and Floods	
29 November 2010	Floods	
13 February 2010	Floods	
From 24 December 2009	Floods	
21 to 22 December 2007	Severe Weather	

The fragile state of communications networks in the Lachlan Shire has often resulted in emergency services relaying on the Lachlan Shire Council Radio Network for communications during some of these specific natural disasters. The landline connections have been disrupted as well as the backhaul for mobile services.

#### **Agriculture**

Within the Lachlan Shire LGA, GrainCorp is one of the main receivers and storers of grain. Currently as part of their business in communicating to the market, GrainCrop regularly send out SMS with a wide variety of messages addressing issues ranging from market prices, time slotting at silos and driver fatigue safety messages. In addition to SMS, many growers are relying on their various smart phone apps to access market information to ensure that they are getting the most up to date information.

Much of the technology surrounding farm machinery management and location technology is also reliant on smart phone data connection, and with the reduced mobile phone coverage in the Lachlan LGA agribusiness has found themselves at a distinct disadvantage.

## POSSIBLE TOWER LOCATIONS

Discussions held with ratepayers of Lachlan Shire have identified a number of sites that may be considered suitable for future development to improve the mobile phone coverage in the Lachlan LGA. Some of sites listed below have been listed on the Radio Frequency National Archive, and they all have infrastructure on these sites that may be able to be utilised and minimise the cost of implementing a tower on a greenfield site.

#### Yellow Mountain

AMTA Site Number: 2877004

Site Location : -32.48078, 146.82733

Carrier: Telstra

Name: YELLOW MOUNTAIN R/T (YWMN)

#### **Boona Mount**

AMTA Site Number: 2877007

Site Location: -32.53884, 147.18177

Carrier: Telstra

Name: BOONA MOUNT (44619)

#### Manna Mount

AMTA Site Number:

Site Location: -3

-33.411947, 147.337378

Carrier: Name: Lachlan Shire Council

## CONSIDERATION OF DISCUSSION PAPER

A minimum quality standard must be set to allow use of the mobile phone coverage to be practical. A consideration must also be given to the capacity allocated to each area specifically when it comes to data use.

The most appropriate indicator for a minimum standard should be acceptable to the expected target market. If the RSSI is too low then the bandwidth will not be adequate for use, and the MNO's will not be able to attract their customers.

The delivery options for the program must also meet the expectations of the communities and address the considerable investment that the federal government is making towards the provision of mobile coverage for both voice and data in regional and rural Australia.

The biggest obstruction to completing this project is the engagement process that the programme will take to the MNO's and in particular the backhaul arrangements that must be made.