

# Mobile Coverage Programme Discussion Paper

## Submission Cover Sheet

### Submission Information

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: Reginald Shann Kellaway

Name of organisation:

Phone:

Email:

Website (if applicable):

Date: 26/02/2014

#### Confidentiality and privacy

All submissions and comments, or parts thereof, will be treated as non-confidential information unless specifically requested, and acceptable reasons should accompany each request. Email disclaimers will not be considered sufficient confidentiality requests.

Respondents lodging a submission should be aware that submissions (excluding any information agreed to be treated as confidential information) will be made publicly available, including on the Department of Communications' website. Submissions and comments will be subject to freedom of information provisions. Despite a submission being identified as confidential or sensitive, submissions may be disclosed where authorised or required by law, or for the purpose of parliamentary processes.

Do you want all or parts of the submission to be treated as confidential? **Yes No**

*If yes, identify below which parts of the submission are to be treated as confidential (and provide a reason):*

No

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 [mobilecoverage@communications.gov.au](mailto:mobilecoverage@communications.gov.au)

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.

Reginald Shann Kellaway



26<sup>th</sup> February, 2014

### Location

Our property is located some 20 minutes to the north of Dubbo, about halfway between Brocklehurst and Mogriguy.

It is located in a dip. While we do not have high mountains about us, the land rises to a ridge along Mendooran Road so that we do not have line of sight with any mobile tower located about Dubbo.

Last year NBN put up a tower to service the area. But unfortunately for us it was located in the village of Brocklehurst so again we do not have line of sight. So though we are only some 8 kilometres from the NBN tower we cannot get this service. If the tower had been located at the higher point of the ridge along Mendooran Road it could have serviced both Brocklehurst and our area.

### Quality of Mobile Reception

Mobile reception is intermittent. Outside the house signal strength can get as high as 2 bars. This only lasts for a short period of time, often too short to make or receive a call. Outside use of the mobile phone is only reliable for sms communication.

Inside the house we do not get a strong enough signal for long enough to have a voice conversation.

### Telstra Next G for Internet

The only way we have this service is by the use of a reasonably powerful external aerial connected to a Next G router.

This service often slows down and sometimes drops out.

### Mobile Phone Solution

With the use of an external aerial we could get a strong enough signal to connect to the internet. Given this, about a year ago I decided to try out the new Cel-Fi repeater. The Cel-Fi Repeater has been tested, authorised and approved by Telstra for use on the Telstra Next G Network. It is not a cheap solution, costing some \$800.00.

Connecting this unit up to an external aerial gave us a solid 4 bars-a good signal strength for the Cel-Fi to work. At first we got excellent reception throughout the house. I thought the problem was solved.

### Cel-Fi Problems

However, over the coming days we noticed that sometimes we would have excellent reception in the house, and then the signal would drop off.

Over the coming months I tried to establish some sort of pattern to this behaviour. I was faced with no signal at times and excellent signal at other times.

When I contacted the importer, Powertec, they suggested that my unit may need a firmware update. I sent the unit back to them (about \$30 post). The unit was returned in about a week but with the same problem. Powertec assured me that they tested the unit and that it was working properly.

We continued trying to find a solution at our end for a number of months. However, the availability of the mobile service diminished over time.

Finally I connected my Next G router to the aerial for the Cel-Fi unit. Our internet access actually improved so the aerial was good.

I then contacted the Powertec to relay my finding and they offered to swap the unit for a new one. They said that they could not find anything wrong with my unit, but just in case they could not detect something, they would replace it. I thought that this was excellent service on their part.

I connected the new unit up when it arrived but no change in the service.

As it was not the aerial, and changing the Cel-Fi unit had no effect, that left the Telstra Network.

### Further Investigation

By checking some forums and the Google Android Software site I found some excellent software that logged the reception on my phone. It recorded the signal strength/quality and the cel unit and tower details that I was connected to.

By setting this to 24 hour logging and downloading the excel files from the phone I could now start to see some patterns in the behaviour. For example, we always had excellent, stable signal in the early hours of the morning, about 12am to 6am. However, most of our friends would not appreciate being rung up at this sort of time.

There are other times of the day where a window can present itself for calls. But in normal terms the service is not usable.

### Help from Telstra

I contacted Telstra on the 5<sup>th</sup> February, 2014 to report my problems. The logging software now gave me something of substance to report. I spoke with [REDACTED] who told me my problem was being escalated to level 3 tech support and that I would hear back from a level 3 tech in 7 to 10 business days. I was given a reference number.

On 17<sup>th</sup> February I contact Telstra again. This time spoke with [REDACTED]. I was informed that a level 3 tech should ring me the next day and that she would ring me also to make sure everything was ok. Neither happened.

On 19<sup>th</sup> February contacted Telstra again. Spoke with [REDACTED]. She informed me that she had just entered it into the system for feedback within 24 hours and that I would hear from [REDACTED], a level 3 tech, the next day. I was also given a new reference number. Nothing happened.

On 21<sup>st</sup> February I contacted Telstra again. I spoke with [REDACTED] who gave me her Telstra employee number as [REDACTED]. She said she spoke with [REDACTED], level 3 tech, who would get back to me in 1 to 2 business days. She said that they were still working on it. She explained to me that the new reference number I was given on the 19<sup>th</sup> February was a level 3 reference number, before that the matter had been with "back of house". I was told "back of house" filter support requests and decide if they are to go into the level 3 queue. This was different to what I had been told on 5<sup>th</sup> February when I lodged my report. [REDACTED] told me that she would give me a call on Monday to check that all was ok. Nothing happened.

On 25<sup>th</sup> February I contacted Telstra. This time I spoke to [REDACTED]. She then informed me that she spoke to [REDACTED], level 3 tech, who informed her that he just assigned the job to a level 3 tech who would start working on it today, and should get back to me the next day. I asked for the contact phone of [REDACTED] but I was told she could not give that out. I asked to be transferred to [REDACTED] but was told they were not allowed to do that. She said to ring them again if I did not hear from [REDACTED] and they would contact him again. I then asked to speak to her supervisor. [REDACTED] came on the line and gave me his Telstra employee number as [REDACTED]. [REDACTED] confirmed to me that they were not allowed to give me the phone contact for the level 3 techs and nor were they allowed to transfer. [REDACTED] apologised for the above and said he would follow up my matter first thing the following morning.

On 26<sup>th</sup> February I received a cal from [REDACTED]. [REDACTED] identified himself as a level2 tech stationed at Townsville. [REDACTED] informed me that a level 3 tech had looked into my issue and had given him a report to relay to me. [REDACTED] informed me that the reason my service was not working was due to heavy congestion at all Telstra towers in the Dubbo area. While the Cel-Fi unit displayed strong signal strength, due to the heavy congestion the actual footprint or coverage area the tower serviced was reduced. In other words, due to my distance from the tower I was cut off or outside the footprint area. In the early hours of the morning the Dubbo network was not congested so the footprint that the tower serviced was extended. [REDACTED] informed me that an upgrade to the Dubbo network was scheduled to be completed by the end of April this year, and hopefully that will alleviate my problems. I asked if he could explain what this upgrade was. [REDACTED] informed me that he was not sure exactly what would be done but he thought a new bandwidth would be added, perhaps in the 1900 or 2100 frequency range, to alleviate some of the load from the 850 frequency 3G network. We agreed that due to distance I would probably not receive these higher frequencies out here, but would rely on the 850 frequency. [REDACTED] explained that with such an upgrade when the Dubbo network became congested mobile phones that could receive these frequencies in Dubbo would automatically switch over to the new service and thus reduce the load on the Next G 850 service. I asked [REDACTED] why not just add more Next G 850 transceivers to the network. He said the high cost did not favour this solution. [REDACTED] informed me that in the meantime there was nothing I could do. I pointed out to [REDACTED]

that the Cel-Fi unit is marketed by Telstra as a solution to poor reception that works. [REDACTED] explained that the Cel-Fi solution is a great solution provided the network is not congested. It is of little use if the network is congested as the Dubbo network is. This is something Telstra does not alert you to when buying the Cel-Fi unit.

#### Summation of Current Situation

After spending some \$800 for Telstra approved solution we still have an unusable situation re mobile phone reception. While the Cel-Fi equipment shows excellent signal strength via the external aerial, our reception for most of the day is unusable. The logs I have covering a number of 24 hour periods show what is happening.

To add to this we have noticed more drop outs in our Next G internet reception via our router though we have not changed this system.

The stated upgrade to be completed by the end of April seems to offer a left behind crowded Next G 850 service. At what congestion point will Dubbo users be switched over to the new frequency.

#### Recommendation

A significant upgrade is needed to country mobile reception, especially in such blackspots like ours.

The supply of signal alone though is not the answer. If the network/facilities behind the signal are already overloaded handling other regional traffic then we will still not see a usable service.

In the Mobile Coverage Programme Discussion Paper, 16<sup>th</sup> December 2013, a range of implementation options are discussed. Regardless of which of the various options are implemented may I make these suggestions as a country user living in a black spot area:

1. There needs to be many more mobile towers constructed to cover country black spot areas. The further away you are from the tower the sooner you are dropped off a congested network.
2. Signal coverage of these areas is useless with the needed number of communication channels being available to ensure reliable voice and internet access.
3. There is a need to ensure that such channels of communication are not diverted during peak times to service regional towns, but are always maintained to service our more remote areas.
4. The towers must link into an improved backbone to ensure there is no overloading of the system or bottlenecks created.
5. There needs to be a responsive fault/feedback system put in place as an integral part of the system. It is the users after all who will know if the system is actually working, and it is from their feedback and fault reporting that both Government and the MNO(s) will be able to act to ensure a functioning system as compared to the current system. The recorded experience with Telstra fault reporting shows that this system is not working or adequate. We need better than this.
6. In support of 5 above, may I suggest the need for a standardised mobile app that can be used to monitor the quality of the service. As stated, I found such an app. Having a standardised app would enable ready communication of service standards. Such apps cost only a few dollars on the Android Market. There are similar apps available across all smartphones.

If you wish to discuss anything further please do not hesitate to contact me.

Yours sincerely,

Shann Kellaway