



PROPOSED TELSTRA TELECOMMUNICATIONS BASE STATION AT 328 Eureka Street, Ballarat East, Vic, 3350

17th February 2014

To demonstrate compliance with the safety standard, a Predictive EME Report is available via the RFNSA website:

<http://www.rfnsa.com.au/3350028>

This report predicts the maximum signal strength from the Proposed Facility at 1.5m above ground level, is 0.41% of the allowable limit that it is permitted to transmit over a 24 hour period. This level is well below maximum limits specified in the safety guidelines and consistent with the advice from ARPANSA in their Fact Sheet "9" on mobile base stations July 2102.

"Mobile phone base stations and telecommunications towers produce weak radiofrequency (RF) electromagnetic energy (EME) exposure levels. The weight of national and international scientific opinion is that there is no substantiated evidence that RF emissions associated with living near a mobile phone base station or telecommunications tower poses a health risk"

ARPANSA Fact sheet 9 July 2012

Further information about EMF

Commonwealth Department of Health
(ARPANSA)
www.arpansa.gov.au

Australian Communications and Media Authority
(ACMA)
www.acma.gov.au

World Health Organisation (WHO)
www.who.int/en/

Consultation

Telstra intends to apply for a Planning Permit with the City of Ballarat for the Proposed Facility in the coming weeks and is keen to receive your feedback regarding this proposal before making the application.

Please provide any comments or questions you may have in relation to the Proposed Facility to Evans Planning no later than Monday 3 March 2014.

Should Telstra proceed to apply for a Planning Permit, your comments will be forwarded to the City of Ballarat (and you will also have the opportunity to provide feedback directly to the Council as part of the Planning Application process).

Contacts

Any further questions/feedback in relation to the proposed facility should be directed in writing to Matt Evans at the address below or via email to helen@evansplanning.com.au

Matt Evans
Evans Planning
PO Box 16021,
Collins Street West
Victoria, 8007
(03) 9937 6336



Telstra is writing to inform you of an important improvement to our mobile telecommunications service with the proposed installation of a mobile telecommunications base station at 328 Eureka Street, Ballarat East (Proposed Facility).

The Proposed Facility will comprise the following:

- 35m high monopole;
- Six (6) panel antennas on a triangular headframe with provision for six (6) future antennas;
- Provision for the future installation of six (6) Remote Radio Units
- An equipment shelter located at the base of the monopole;
- Utilisation of existing 3m wide access track via Eureka Street and underground fibre route via existing Telstra pit on Eureka Street; and
- 2.4m security fence with double access gate.

Telstra intends to apply for a Planning Permit for the Proposed Facility with the City of Ballarat.

The location of the Proposed Facility is consistent with relevant provisions of the City of Ballarat Planning Scheme and is considered to be appropriate for the following reasons:

- It will provide improved NextG[®] mobile services in the rapidly re-developing Ballarat East area, including the addition of Telstra 4G LTE;
- Its proximity to the Museum of Australian Democracy at Eureka (M.A.D.E) will provide more reliable coverage for local residents as visitor numbers increase.
- The site is set well within the grounds of this non-residential site;
- The site provides adequate visual and physical separation from surrounding properties including M.A.D.E;
- The site offers screening by the way of existing factory units and an established treeline to the rear of the site, minimising visual impact; and
- Although able to provide coverage to M.A.D.E, there will be no appreciable visual impact of the Proposed Facility when viewed from the Stockade.



Why does Telstra need a new facility at Ballarat East?

Telstra constantly monitors our network for usage and performance. Ballarat East needs to have additional telecommunications mobile network infrastructure installed to meet the increasing demand being placed on our network by our customers. The Proposed Facility is an important part of Telstra's infrastructure upgrade program in the City of Ballarat which includes adding capacity to the existing sites which serve the area, as well as looking at installing new sites.

Telstra needs to add capacity to the network to improve and maintain local mobile network services (including voice calling and SMS), as well as video calling, video-based content services (like news, finance and sports highlights) and internet browsing via its NextG[®] network.

- Telstra understands that some locations where we need to place our facilities are more sensitive than others. Telstra works diligently to find a balance between providing high quality services and minimising our impact on the community and the local environment. In selecting the site, in addition to technical requirements, Telstra has taken into account a number of other important non-technical criteria, including:
 - the potential to co-locate at an existing telecommunications facility;
 - the potential to locate on an existing building or structure;
 - the visual impact on the surrounding area and the need to obtain relevant town planning approvals;
 - the proximity to community-sensitive locations and areas of environmental heritage or significance; and
 - the type of and ability to secure tenure at the site.



Example of a similar Telstra headframe and monopole

How do Mobile Phone Networks Work?

To explain why mobile network carriers place facilities at specific locations, it is important to first explain a little about how a mobile network works.

A mobile communications network is made up of a patchwork of cells covering a geographic area. They work by sending and receiving low power radio signals from antennas that are attached to mobile phone base stations. When you make a call or try to download content, your handset or data modem will usually "talk" to the facility nearest to you – as you move outside of that cell, the phone will "talk" to adjoining facilities located in different cells. Telstra's network is made up of many low-powered facilities located on the rooftops of commercial buildings, clubs, apartment buildings, hospitals, industrial buildings, sports complexes, and on existing infrastructure such as light poles, high voltage electricity towers and telecommunications towers that are positioned throughout the community to provide reliable, continuous network coverage for both local customers and those travelling through the area.



There are many factors which can cause a call drop-out or a slow data speeds while you are transferring content. Some of these are now explained.

First, you may be too far away from a facility to pick up a phone signal, or there may be objects blocking the signal from the nearest facility – such as hills, large buildings or even trees. Second, the facility may be handling as many calls as it can manage – call drop-outs and slower data speeds can occur when too many customers are using the available resources of a facility at once. Third, the depth of coverage (which affects the ability to make calls inside buildings), may be insufficient in some local areas.

Base Stations and Health

Telstra understands that some people have genuine concerns about the levels of Electromagnetic Fields (EMF) that the Proposed Facility will emit and is committed to addressing those concerns responsibly. EMF is sometimes known as electromagnetic radiation (EMR) or electromagnetic energy (EME). Electromagnetic fields are present everywhere in our environment – the earth, sun and ionosphere are all natural sources of EMF. We rely on the expert advice of international and national health authorities

including the World Health Organization (WHO) and the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) for overall assessments of health and safety impacts.

The International Commission on Non-Ionizing Radiation Protection (ICNIRP) has issued guidelines on levels of allowable public exposure to Radio Frequency (RF) fields, including guidelines on RF from mobile phones and base stations that Telstra adheres to. These guidelines have a large safety margin built into them.

In addition, further information is available at: <http://www.telstra.com.au/eme> and EMF Explained Series www.emfexplained.info

Does the Proposed Facility meet the ARPANSA safety limit?

It is Telstra's responsibility to comply with the mandated standard (RPS 3) for EMF set by ARPANSA, which is based on the safety guidelines recommended by the WHO. The safety standard works by limiting the network signal to a level low enough to protect all people, in all environments, 24 hours a day. The safety limit itself has a significant safety margin built into it.