

Australian Mobile Telecommunications Association

Building next to a mobile phone base station



When planning to develop a building or structure next to a mobile phone base station antenna, it is critical to engage with the mobile network operators (Telstra, Optus and TPG Telecom) early in the planning process.

Early engagement ensures that the mobile network operators can maintain reliable mobile coverage to customers and to mitigate any health and safety concerns to construction workers from the radiofrequency energy emitted from the base station antennas.

What are base stations?

Mobile phone base stations transmit and receive radio signals to and from a mobile device within the coverage area. They consist of antennas, transceivers, amplifiers and electronics.

Base station antennas are typically located on towers, utility poles and commercial rooftops including on the side of a building's façade.





Why should I engage with the mobile network operators?

Engaging with a mobile network operator early in the planning process is critical to address the following issues:



Coverage:

Construction of new buildings can block a mobile signal impacting customer's ability to use the network and make telephone calls including to Triple Zero Emergency Services.



Safety:

Base stations emit radiofrequency electromagnetic energy. While they are designed to comply with Australian electromagnetic energy safety standard, it's important to ensure that construction workers are not exposed to electromagnetic energy levels that exceed the safety guidelines.



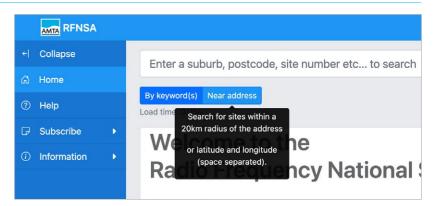
Network optimisation:

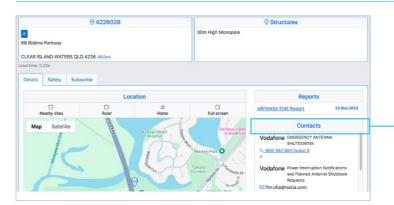
Mobile network operators can offer insights on how the new building might impact network coverage and performance. This can help in planning the building's design to minimise any negative impact on mobile services.

How to find a mobile phone base station?

Visit www.rfnsa.com.au to find out the location and the ownership of every mobile phone base station deployed in Australia.

You can search by address using the RFNSA website.





Who do I contact if my development will impact a base station?

It is important contact every mobile network operator who has infrastructure located on the site.

Contact details of each operator can be found under the Contacts Heading.

Electromagnetic energy assessment

If working close to a base station antenna, construction partners and developers should evaluate the area for any electromagnetic energy impacts. **The EME Guide for Site Safety** is available from the mobile carriers and property owners, which will visually show the areas where the EME levels exceed the public exposure limits. A power or shutdown of antennas may be required to ensure that team members are not exposed to a level of EME that is above the exposure limits.

Shutdowns impact network performance and have significant customer impact. They must be organised well in advance of works and carriers have strict procedures around these. Contact carriers directly to discuss these issues.

Is there training available on electromagnetic energy?

Yes. Consider whether your team needs to undertake **RF Electromagnetic Radiation Awareness (RADHAZ)** training to ensure they understand any hazards, the safety practices and the regulatory requirements for RF safety.



The contact details for the mobile network operators are:

Telstra:

Basestation.Enquiries@team.telstra.com

Ontus

EMEenquiries@optus.com.au

TPG Telecom/Vodafone:

EME.enquiries@tpgtelecom.com.au

