

mmWave

Fact sheet



What is mmWave?

mmWave – pronounced “millimetre wave” – is a short-range, high-frequency network technology, now most commonly associated with 5G.

mmWave gets its name from the radio frequency it uses to connect your mobile phone to the network - and enables you to make calls, send texts or get online.

Is mmWave new?

No, mmWave is not new. The frequencies that mmWave use have been used in Australia for a long time for wireless communications and satellite internet. What is new though is our ability to use this technology for personal mobile phones.

How does mmWave work?

The higher frequency of mmWave means it is great for carrying a lot of data over short range. mmWave cells broadcast a signal up to a few hundred metres from the base station, meaning it's best suited for areas where there are lots of people using the mobile network at the same time. Places like train stations, shopping centres or even suburban areas where there's high network traffic.

Why is Telstra using mmWave?

We're using mobile phones more than ever before and now devices such as smart watches, tablets and computers are also connecting to the mobile network.

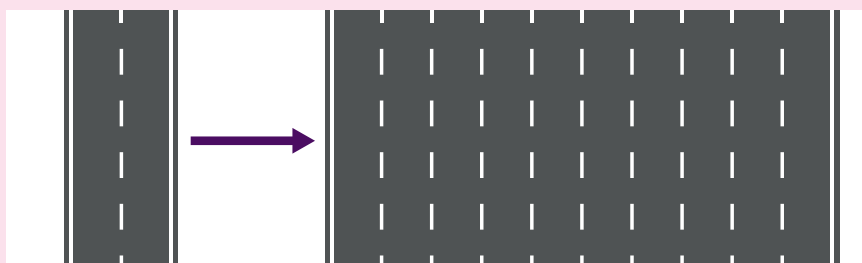
We can all benefit from the capabilities of mmWave technology – it has more bandwidth on offer and will allow the Telstra network to carry more data and alleviate congestion. That means a better customer mobile experience for you with improved coverage, connectivity and reliability.

Is mmWave safe?

Yes. Both the medical and scientific experts say that 5G is safe. The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is the Australian Government's primary authority on radiation protection and nuclear safety. Recent scientific reviews by ARPANSA and Swinburne University of Technology found no evidence of adverse health effects from low-level radio waves used in 5G, including mmWave. Australia's Chief Medical Officer, has stated publicly that *'I'd like to reassure the community that 5G technology is safe. There is no evidence telecommunication technologies, such as 5G, cause adverse health impacts.'*

Benefits of mmWave Spectrum

5G mmWave provides significant capacity increase with additional spectrum.



2 LANE HIGHWAY

4G & 5G mid-band
100–200 MHz spectrum

10 LANE FREEWAY

5G mmWave
Up to 1000 MHz of spectrum



Example 5G mmWave small cell



Where can I find out more?

Use your device camera to scan this QR code which will take you to Telstra's website to find more information, or you can go here: tel.st/tell-me-about

