The need for wireless connectivity and its safety in Australia

Hi, I'm Mike Wood from Telstra.

Today we're talking about the importance of wireless connectivity for all Australians and how we ensure that the networks are safe.

Australians depend more and more on mobile connectivity every day,

whether it's working or studying from home or my favourite working in a local coffee shop, running a small business or a weekend market stall, having tradies visit us at home, or our emergency services attending to people in the local community.

Mobile connectivity plays

a vital role for everyone.

Australians are using our mobile network

more and more every day.

Each year we're seeing a 30% increase year

on year in data by our customers.

Now that's significant.

So how do we cater for that growth and demand?

Imagine if the traffic on our local streets grew by 30% each year we would need to add more lanes.

Well that's exactly what we have to do on the mobile network, add more lanes or capacity.

We do this in a number of ways.

So in residential areas, we build small cells that can blend in better with existing infrastructure, like

on power poles and straight light poles.

This provides dedicated local coverage and that extra capacity or extra lanes.

In rural and metro areas, we build a mix of towers and other facilities, like on buildings

to provide that coverage and that capacity.

In the cities shopping centers, universities, sports stadiums and transport hubs, we use a mix of everything.

So we use towers, we use building rooftops, small cells and dedicated indoor coverage solutions

in buildings which are just like Wi-Fi but for the mobile network.

We have to design the networks carefully to match the need by people.

Now, with the growth of smart and sustainable cities, we're always looking at ways to optimise our network and to deliver greater efficiency and connectivity.

So as we build new 5G sites, we also update the 4G technology to use all of the available spectrum,

giving the best connection and capacity at each site, adding as many lines as possible.

In the future, more spectrum will be used as 5G advances to provide even greater capacity, higher speeds and better connectivity for all Australians.

We want to make sure it's available where people need to connect.

So how do we ensure our technology is safe?

Well, we use advanced computer modelling for the site design assessments, and we test our latest

mobile technology in the labs to ensure it meets the EME safety standards.

Importantly, we also test our sites in the community where people are to provide that reassurance on safety.

Now, testing in a really busy area like the Melbourne CBD where there are many people using mobiles shows there are lots of mobile connections and very low EME levels and this is consistent with what the government audits have found.

We can see the 100% line here which is this purple line that’s the general public safety limit.

Each of these is a factor of 10, now look at all the radio channels that you can see these are all the mobile channels, and look how well below they are, below this safety limit.

Testing our small cells in local communities also shows the same thing, very low EME levels.

I hope this video has provided an insight into the importance of wireless connectivity and the safety of our networks.

Thank you for watching.