



TPG Telecom and Samsung complete 5G virtualised RAN trials with 26GHz mmWave and expand technology collaboration

12 November 2021 – TPG Telecom and Samsung Electronics Australia have expanded their 5G mmWave technology collaboration to more trial sites after successfully completing the first 5G virtualised, radio access network (vRAN) trials with 26GHz mmWave in Australia.

The vRAN trials saw the companies achieve a throughput speed of 2.3Gbps using 400MHz of TPG Telecom's 26GHz spectrum holdings and Samsung's 5G mmWave Compact Macro device.

TPG Telecom and Samsung were also able to achieve 4Gbps of cell throughput using MU-MIMO (multi-user, multiple input, multiple output) technology which allows multiple devices to more efficiently coordinate when they communicate with one another.

As part of the vRAN trials, Samsung and TPG Telecom successfully tested different line-of-sight (LOS) and non-line-of-sight (NLOS) scenarios to simulate the real-life user experience when connected to 5G networks. The trials also used the reflecting properties of mmWave to achieve a steady rate above 1Gbps user throughput in NLOS scenarios up to 1km away.

The trials pave the way for new mobile and fixed wireless applications for TPG Telecom as the high-powered, lightweight and compact Samsung device can easily be installed on the sides of buildings, as well as utility poles, for rapid 5G network deployments.

"At TPG Telecom we are focused on building the smartest 5G mobile network in Australia and these results show we are on track to achieve just that," said TPG Telecom Executive General Manager Mobile and Fixed Networks, Barry Kezik.

"By combining our spectrum assets with smart engineering, we are able to achieve far greater spectral efficiency than what we have seen from others in the industry. This is a great result and shows that innovative engineering and smart network design can help extend our reach, while also delivering great speeds and an excellent experience for customers."

The trials were achieved at TPG Telecom's Innovation Lab in Glebe, Sydney which opened in July as a hub for TPG Telecom and its partners to drive product and technology innovation, including network virtualisation and emerging 5G applications for industry.

Having successfully completed the initial trials, TPG Telecom and Samsung will now expand the scope of their technology collaboration.

Commenting on the successful trial, Garry McGregor, Vice President, Mobile Division, Samsung Electronics Australia, said: "The goal of this trial was to test the capabilities of Samsung's 5G solutions, including its cutting-edge 5G vRAN, in a range of settings. We have now successfully achieved that, which presents us with the exciting opportunity of continuing to elevate and support 5G network infrastructure in this country. Successfully deploying and conducting the trial even with the restrictions imposed by COVID-19, were a real achievement and show the commitment from both TPG and Samsung to delivering best in class 5G infrastructure."

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About TPG Telecom: TPG Telecom is an Australian telecommunications company which is home to some of Australia's most-loved telecommunications brands including Vodafone, TPG, iiNet, AAPT, Internode, Lebara and felix. As the second largest telecommunications company listed on the ASX, TPG Telecom has a strong challenger spirit and a commitment to delivering the best services and products to its customers. www.tpgtelecom.com.au

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