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Media release

Australian first: NBN Co achieves 20 Gbps speeds in live network technical trials

- NBN Co has successfully trialled multi-gigabit technologies concurrently on the same fibre in its live network – achieving speeds of 20Gbps symmetric on 25GS PON.
- The results demonstrate the technical feasibility of the **nbn**[®] network to support future multi-gigabit services for retail providers and property developers who choose **nbn** to help meet the demands of Australian homes, businesses and new developments in the future.
- The trial is an important step in delivering **nbn**'s long-term network strategy.

NBN Co today announced the successful completion of a field trial with partner Nokia using three generations of passive optical network (PON) technologies – GPON, XGS PON and 25GS PON – over its Fibre to the Premises (FTTP) network.

The successful in-field trial demonstrates the fibre in **nbn**'s network is capable of supporting the next generation of broadband services of XGS PON and 25GS PON, whilst maintaining current active services on existing GPON fibre technology. This is the first time **nbn** has demonstrated these capabilities on its fibre in the field, with previous testing done in a lab setting.

During the field trial, **nbn** and Nokia were able to achieve speeds of 8 Gbps (symmetric) on XGS PON and 20 Gbps (symmetric) on 25GS PON, a new Australian record for a passive optical network.

The trial is an important step in delivering **nbn**'s long-term network strategy, which is exploring the introduction of multi-gigabit services to homes, businesses, and new developments across the country in the future.

Dion Ljubanovic, **nbn** Chief Network Officer, said:

“This successful trial shows us that the performance of the fibre we deploy in our fixed line footprint is limited only by the capabilities of equipment connected to it – as new solutions become available, we can introduce them to increase the capabilities and speeds we can offer on the network.

“Homes and businesses across Australia are demanding more data than ever before, and this will only continue to accelerate over the coming decade as we see increased adoption and applications of emerging technologies such as artificial intelligence, virtual and immersive reality.

“We now have around 775,000 homes on the **nbn** network using more than a terabyte of data per month, which has grown by more than 30 per cent in the last year alone. As we plan and begin to deliver upgrades in the network now for the demand we expect to see in five, 10 or 20 years' time, trials like this are so important.

“This could be especially exciting for Australia’s property development industry, the industry building Australia’s newest communities, which are critical to supporting Australia’s growing population.

“The results of this trial demonstrate the power of our network to introduce multi-gigabit speeds over our fibre and the exciting possibilities in store for further collaboration with our partners to deliver this to the people of Australia.”

Andrew Cope, Managing Director, Nokia Australia and New Zealand, said:

“We are delighted to have worked with **nbn** on this trial. The trial used Nokia’s Lightspan MF access node technology, which can support convergence of multi-PON services and beyond over single fibre infrastructure, as demonstrated by **nbn** in this trial.

“To meet the future demands of the network in the next decade, **nbn** is focused on enhancing the capacity and capabilities of the fibre infrastructure through cutting-edge technology. The deployment of Nokia's next-generation MF series Optical Line Terminals will support higher capacity fibre optic broadband technologies and multi-gigabit speeds while improving power efficiency.

“By embracing these advancements, Australia is positioning itself at the forefront of the digital revolution, ensuring the **nbn** network's capacity to address the country's evolving broadband needs well into the future.”

Notes to Editors

- XGS PON and 25GS PON technologies have the potential to increase broadband speeds and capacity across the **nbn** network. They also offer symmetrical upload and download speeds, with upload speeds becoming more critical with the rise of applications such as cloud gaming, HD video conferencing and the adoption of emerging technologies such as artificial intelligence, virtual and augmented reality.
- **nbn** was among the first in the world to deploy Nokia’s next generation MF series Optical Line Terminals, which is capable of supporting the higher bandwidths required for XGS PON and 25GS PON technologies.
- **nbn** was also among the first network operators in the world to announce plans to deploy extended range 5G mmWave into its Fixed Wireless network.

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