

# BRIEF: ACCC broadband stats show LEOsat potential - but also problems

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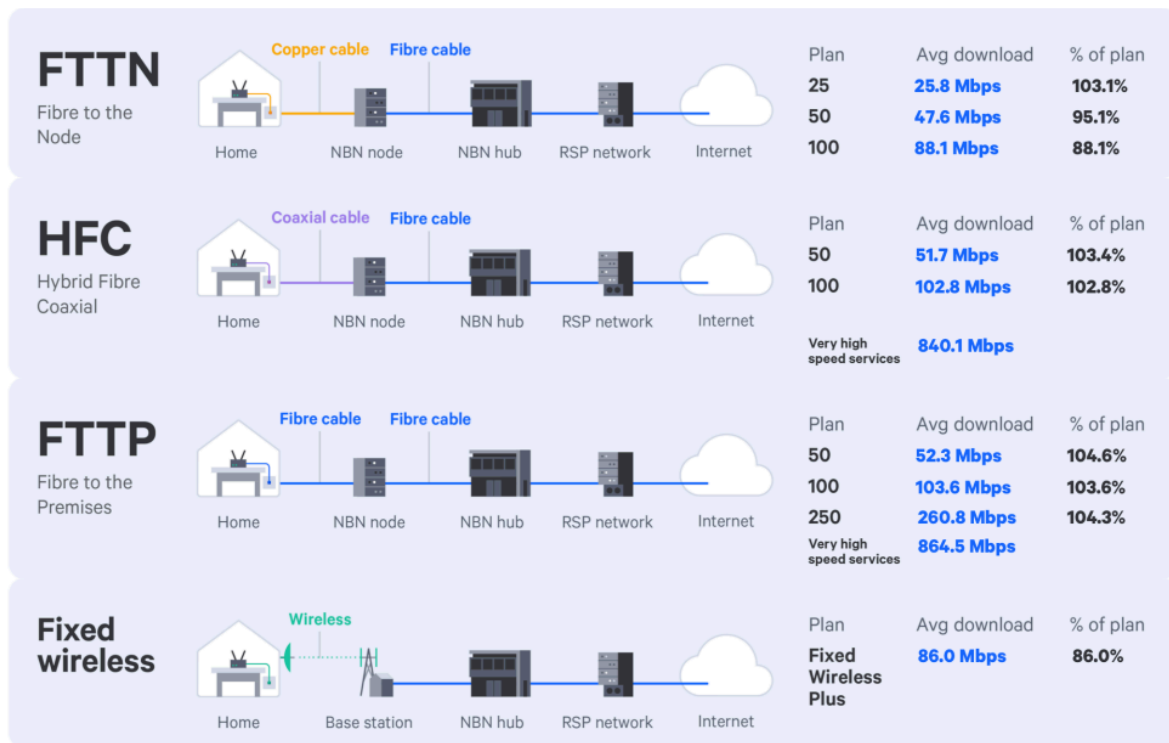
# ACCC broadband stats show LEOSat potential - but also problems

Abstract: Last week the ACCC published its quarterly “[Measuring Broadband Australia](#)” report for December 2024, benchmarking satellite broadband for the first time. The report exposes some issues with NBN FTTN, fixed wireless, and Sky Muster satellite. Starlink showed great promise, delivering high average download speeds. But there is also a lot of variation in Starlink performance, suggesting the satellite constellation needs more capacity to reliably meet demand before it could be considered an option for universal service provision.

## Measuring Broadband Australia results

The ACCC’s broadband performance data shows incremental improvement in NBN broadband performance, but it is unevenly distributed. In particular, FTTN struggles to deliver plans above 25Mbps reliably. Only 88% of FTTN connections could actually deliver a 100Mbps plan. Similarly, only 86% of Fixed Wireless Plus plans (nominally 75Mbps download) could achieve nominal speed.

Figure 1. NBN broadband performance by access technology



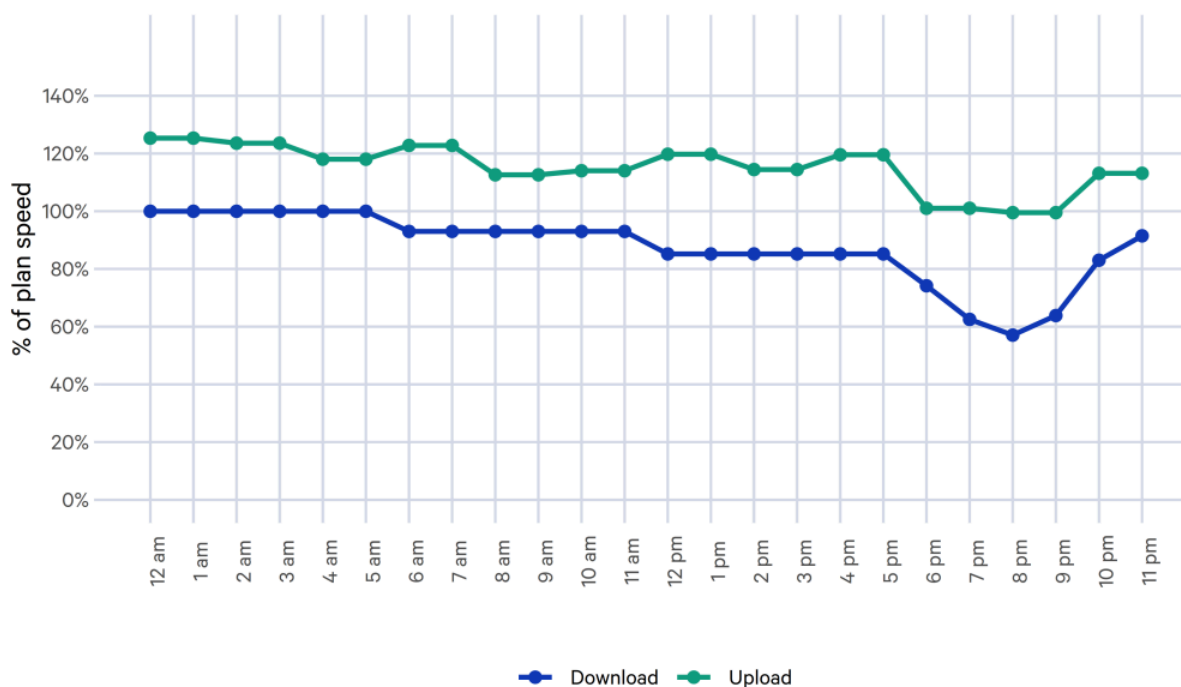
Source: [ACCC Measuring Broadband Report](#), 27th issue, December 2024.

These are not new observations, and NBN Co has moved to address them by NBN-led FTTP upgrades to the worst FTTN lines, demand-driven upgrades to FTTP in other areas, and a \$750 million investment in the fixed wireless network to lift speeds to 100Mbps across the network. Further fixed wireless upgrades are planned.

Most interesting was the first-time inclusion of both Starlink and the NBN SkyMuster satellites in the report. This provides us with some hard data on the performance of both. However, the two are not strictly comparable. Sky Muster offers a small number of plans with fixed nominal speeds. Starlink, in contrast, is available to all residential customers on the same best-efforts basis.

Sky Muster showed acceptable performance on speed, though there is a significant degradation in performance in the 5pm to 10pm busy period. However, there was significant variation in performance, with only 49% of tested connections meeting or exceeding the 100% target. This is due to the fact that Sky Muster capacity is inherently fixed, and higher demand can only be managed by rationing capacity.

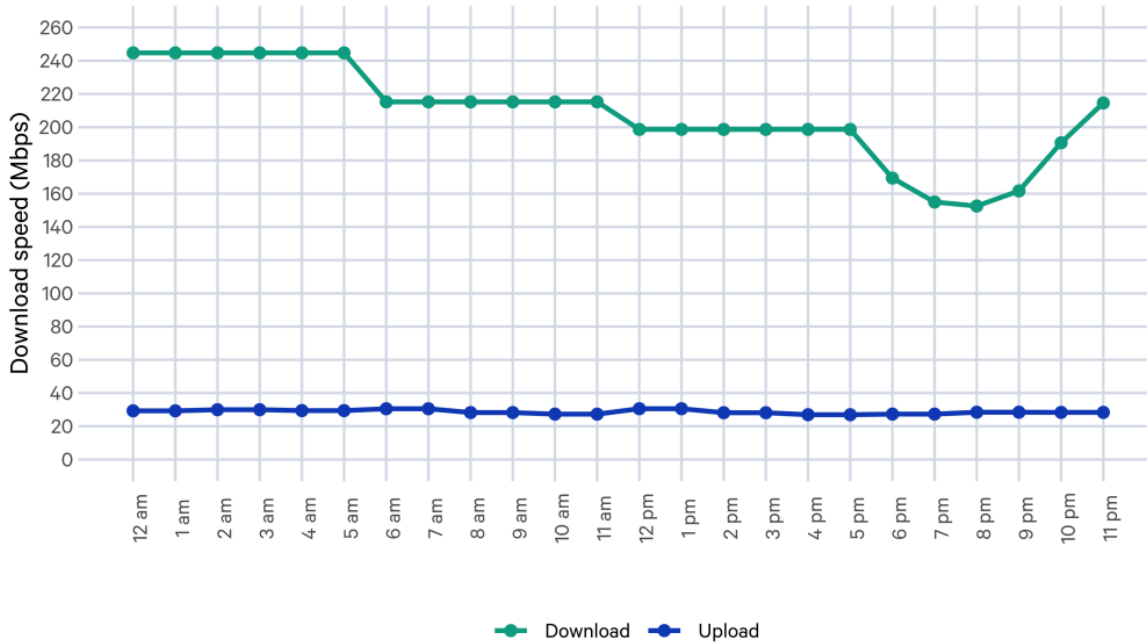
Figure 2. Sky Muster average hourly speed performance (% of plan, across all plans)



Source: [ACCC Measuring Broadband Report](#), 27th issue, December 2024.

In contrast, Starlink’s capacity has significant scope to grow as new satellites are added to the constellation. However, the current constellation shows signs of capacity limits. Starlink, too, shows a significant drop in performance around busy times, larger than Sky Muster’s in proportionate terms.

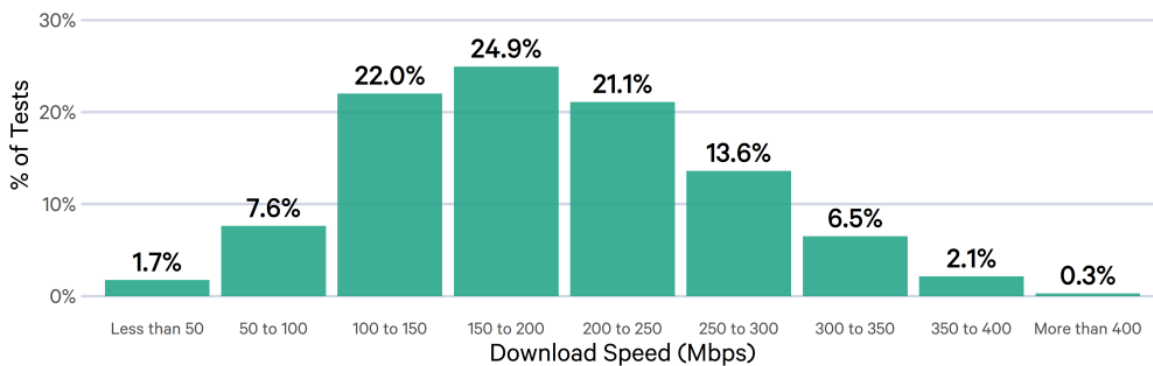
Figure 3. Starlink average hourly speed performance, (Mbps)



Source: [ACCC Measuring Broadband Report](#), 27th issue, December 2024.

In addition, Starlink also shows significant variation in performance amongst its users. This suggests that the density of the Starlink constellation is not high enough to guarantee speed at all times.

Figure 4. Starlink frequency of download speeds attained



## Why does this matter?

We have speculated on the potential for Starlink to shoulder the burden of remote communications in Australia and New Zealand, including USO obligations. We still think this is a real (and maybe inevitable) prospect.

However, the ACCC's data shows that this will take time. Starlink has not yet reached maturity as a technology. It is still in a rapid expansion phase where it is struggling to meet demand and provide a consistent experience.

This will come as capacity grows. Starlink is launching new satellites every day, expanding the existing constellation of approximately 6,700 satellites ([November 2024](#)). It eventually plans to have as many as 42,000 satellites, around six times as many as now. And since Starlink has mastered the art of both low-cost satellite manufacture and low-cost space launches, this is no daydream (see our report "[Starlink viability will move the USO debate forward](#)").

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