

2023 Telecommunications Monitoring Report – Summary Version

Pūrongo Aroturuki Torotoro Waea 2023



NEW ZEALAND TELECOMMUNICATIONS SNAPSHOT

Ā AOTEAROA WHITIMAMAO - HE HOPUĀHUA



53,000 urban households

shifted off copper to fibre or wireless alternatives



Satellite connections

are growing fast, reaching 37,000, making up 14% of rural connections



Fewer rural consumers are satisfied

with their broadband service (68%) than urban consumers (78%)



Peak time download speeds

for Starlink (184Mbps) are more than four times faster than the next best rural alternative that we measure



Telecommunications investment increased

to \$1.61 billion, up 8% from 2022



There are four new MVNOs

bringing the total to nine MVNOs in the market

Copper broadband

pricing

is \$28 more expensive per month

than the OECD average



Two-thirds of residential

fibre connections are on Fibre 300 (67%)



"Endless" postpaid connections

now make up 66% of all postpaid plans, up from 59% in 2022



Average 5G mobile coverage

has increased to 23% of the population - up from 18% in 2022



Nearly 300,000 households

bundle broadband with electricity



Overall

In the year to June 2023, the telecommunications market in New Zealand reached a major milestone with the completion of the UFB roll-out. The focus now is on migrating remaining consumers off the copper network to other technologies, as well as addressing the challenges associated with delivering high quality, affordable, broadband to rural communities. Wholesalers are focused on fibre uptake, which has reached 73%, and transistioning from building to operating their networks as long term infrastructure investors. In retail, 2degrees has consolidated its merger with Vocus and acquired MyRepublic's broadband customer base. Vodafone rebranded as One NZ, and we are seeing an ongoing increase in penetration of electricity and telecommunications bundlers.

The retail broadband market is increasingly competitive, offering a wide range of plans across fibre, HFC, wireless, copper, and satellite technologies. Urban broadband prices for fibre and cellular fixed wireless services are in line with, or lower than, OECD averages. We continue to observe higher pricing and lower affordability on some technologies in rural areas compared with urban areas. We also observe a large variance in the national copper prices offered by major RSPs, with the most expensive service costing \$32 per month more than the cheapest, indicating that consumers may benefit by shopping around. National copper broadband pricing is \$28 more expensive per month than the OECD average, an increase of \$8 on last year. While only 4% of urban consumers have a copper connection, 37% of rural consumers pay for a copper connection, and many of these consumers could be on a lower-priced or better performing technology.

The MNOs note strong revenue performance in the mobile market. The price an average prepaid consumer needs to pay to meet their usage sits at the OECD average. However, the price an average postpaid consumer needs to pay to meet their usage is \$15 per month higher than the OECD average. The MNOs have shifted their wholesale strategies resulting in the arrival of four new MVNOs to the market, providing consumers with more choice. We will monitor how the growing number of MVNOs impacts the mobile market.

Despite the completion of the UFB programme, providers continue to invest approximately \$1.5 billion annually, as investment in wireless technologies ramps up, particularly 5G deployment. Funding for these investments is partially sourced from the proceeds of the MNOs' passive network infrastructure sales, which all three MNOs have completed.

The 2023 Auckland Floods and Cyclone Gabrielle underscored the importance of resilient communications infrastructure. The providers worked well together to bring communications back online. There is ongoing work underway to improve resilience and this needs to be a continued focus for industry, particularly in more isolated rural and remote areas.

Urban

Urban broadband is a significant success story in New Zealand, with fibre deployment providing high-quality access for urban households. 78% of urban customers have a fibre connection. While most fibre customers opt for Fibre 300, Fibre Max connections are growing, and Fibre 50 is an option for lower data users.

The urban fixed-line broadband market is moderately concentrated (HHI of ~2,194) and the market share held by the top 3 retailers has decreased 4% to 74%. The retail market offers pricing in line with or better than OECD averages

In urban areas, cellular fixed wireless broadband services are a credible alternative for households with lower data needs; 15% of urban homes and businesses connect via a cellular fixed wireless service. The MNOs each offer a range of competitive plans over 4G and 5G, aimed at price conscious customers. This prompted the launch of entry level Fibre 50 services from Chorus and the LFCs and we note an increase in uptake of lower-priced fibre services in the year as a result of competition. With these choices available, Chorus continues to decommission legacy urban copper and during the year 53,000 urban Kiwi households shifted off copper to a better broadband alternative.

The focus for urban broadband is shifting from infrastructure to retail service quality and in-home experience. There is significant room for improvement across most dimensions of retail service quality. In the home, our testing indicates consumers experience drops in speed between the router and device, hampering their ability to make the most of their connection. Both retailers and consumers can take steps to improve their broadband service.

As households increase consumption of data intensive content such as videos, online meetings, and gaming, urban New Zealanders are well provisioned, with a broad selection of choice, now and into the future.

Rural

Rural areas, defined as locations outside of specified fibre areas, house 13% of New Zealand's population. Without fibre, consumers' broadband options may include copper, cellular fixed wireless, non-cellular fixed wireless, and satellite broadband.

We estimate that the rural fixed broadband market is moderately concentrated (HHI ~1,802). With no fibre to retail, and reducing demand for copper services, the top 3 providers are more reliant on their cellular fixed wireless networks in rural areas to compete with non-cellular fixed wireless and satellite providers.

18% of rural households on copper services moved to an alternative in the last year. Many selected Low Earth Orbit (LEO) broadband, which accounts for 14% of rural connections, giving New Zealand the highest number of satellite connections per capita in the OECD. Starlink's LEO satellite broadband is significantly faster than other rural options but comes at a higher cost. This makes it less affordable than similarly performing options in urban areas.

Regional telecommunications providers (WISPs) play a valued role in rural communities, providing 15% of rural connections. These providers have responded to LEO satellite competition in recent times with price cuts, increasing data caps, or boosting speeds. Some rural providers are deploying fibre pockets within rural communities, improving consumers' broadband options.

4G fixed wireless broadband is available in parts of rural New Zealand, but retail pricing remains higher than in urban areas. It is not entirely clear whether this is mostly due to higher inputs costs in rural areas, or the lack of fibre-based competition.

Improvements in rural broadband services can be seen in the expansion of the Rural Broadband Initiative (RBI), the emergence of pockets of rural fibre, the entry of LEO satellite broadband and the regional providers' responses, including price drops and increased data caps. However, gaps in performance and pricing between urban and rural services persist, compounded by lower affordability in rural areas. To ensure all New Zealanders have access to high-quality, good value broadband services, we would like to see providers close these gaps.

Mobile

In the retail mobile market, two thirds of postpaid consumers have migrated to endless data plans. However, as noted above, the price an average postpaid consumer needs to pay to meet their usage is \$15 per month higher than the OECD average. The price an average prepaid consumer needs to pay to meet their usage sits at the OECD average.

All three MNOs have divested their passive network infrastructure to TowerCos, providing a cash injection for investment spend, including 5G deployment. 5G coverage continues to grow, reaching 27% of the population in June 2023, compared with 18% the year before.

Our surveys show that 60% of mobile consumer have been with the same provider for more than 5 years, and that there is room to improve aspects of service, particularly customer service. The arrival of four new MVNOs into the market, bringing the total to nine MVNOs, creates further retail competition and differentiation of services. For example, two MVNOs are offering plans based on speed-tier, rather than on a data cap.

SUMMARY OF KEY STATISTICS NGĀ TINO TATAURANGA: HE WHAKAPOTONGA

Urban connectivity at home

Honotanga ā-tāone i ro kāinga

- With the completion of the ultra-fast broadband (UFB) initiative in December 2022, bringing fibre within reach of 87% of Kiwi homes and businesses, Chorus and the Local Fibre Companies (LFCs) have shifted from a 'build' to 'operate' focus on their fibre networks.
- Consumers continue to move away from copper. Copper broadband connections in urban areas fell 41% to 77,000, meaning that a total of 53,000 urban broadband connections left the copper network over the year (the 12 months to 30 June 2023). This was driven by Chorus' copper withdrawal programme.
- The 300Mbps fibre plan, often referred to as Fibre 300, continues to be the most popular wholesale fibre plan, increasing from 48% to 57% of all wholesale fibre connections.
- Our Realspeed testing shows drops in speeds between the router and the device across all technologies on home Wi-Fi networks – with the greatest drops observed for high-speed plans such as Fibre Max and Hybrid Fibre-Coaxial cable (HFC).
- Residential electricity-broadband bundles by the larger electricity bundlers increased by around 11% in 2023. Around 290,000 Kiwi households are bundling their electricity and broadband.
- Larger Retail Service Providers (RSPs) have passed through wholesale price increases of around \$5 to \$7 per month for fibre and copper-based broadband services. However, some of the smaller brands have reduced pricing on these services by a similar amount.
- New Zealand's average broadband download speed is 97Mbps – the 13th fastest in the OECD – ahead of Australia, the United Kingdom, Ireland, and Germany.

- Our Measuring Broadband New Zealand (MBNZ) reports show stable download and upload speeds across all urban broadband technologies in the last 12 months, which is important to help ensure consumers have a consistent online experience for everyday activities such as web browsing and using social media.
- Our indicative data on connection faults demonstrates that urban households experience fewer and shorter faults than rural households. Urban customers on copper services are more likely to experience service interruptions than those on fibre.
- Urban broadband prices are in line with, or lower than, OECD averages.
- The percentage of household average net income required to purchase broadband in urban areas continues to vary across New Zealand. Fibre 50 generally requires a lower percentage of average household income than other broadband options, with a range of 0.79% to 1.31%.
- Our survey results show that 40% of urban broadband consumers have been with their current provider for more than five years, down from 41% the previous year.
- Our survey results show that urban broadband customers are most satisfied with coverage and availability and least satisfied with pricing.



Rural connectivity at home Honotanga ā-tuawhenua i rō kāinga

- Copper connections in rural areas decreased by 18% over the past year and now make up just over a third of rural broadband connections.
- Wireless technologies serve the rest of rural New Zealand – divided between non-cellular fixed wireless provided by specialist rural operators, 4G cellular fixed wireless provided by mobile operators, and satellite services provided by local and international operators.
- Satellite continues to be the fastest growing technology, following the entry of Starlink, with connections increasing nationally from 12,000 to 37,000 over the past year – the highest number of satellite connections per capita in the OECD.
- Testing of ADSL and 4G cellular fixed wireless broadband speeds shows almost no difference between urban and rural areas for each technology.
- VDSL testing in rural areas shows download speeds are around 10% slower than VDSL services in urban areas (presumably due to longer copper loops).
- Download speeds for Starlink (184Mbps) are more than four times faster than the next best alternative that we measure (rural 4G cellular fixed wireless at 45Mbps).
- While Spark continues to be the largest provider in the rural retail broadband market, the market is less concentrated than in urban, reflecting the growth of non-cellular fixed wireless and LEO satellite services.

- National copper broadband pricing is \$28 more expensive per month than the OECD average, an increase of \$8 on last year.
- Copper pricing has the greatest variability across all the retail pricing we monitor – with the highest price being \$32 per month more expensive than the lowest price.
- Rural cellular 4G wireless pricing ranges from \$96 to \$200 per month. Similar plans are more expensive in rural areas than in urban, and more likely to have a data cap.
- Non-cellular fixed wireless pricing ranges from \$70 - \$200 per month, with set-up costs ranging from \$0 - \$899+ for equipment.
- Starlink's Standard residential plan pricing is \$159 per month – with set-up costs of up to \$1,040 for equipment.
- Satellite requires the highest percentage of average household income in rural areas, with a range of 1.68% to 2.81%.
- 68% of rural broadband customers are satisfied with their broadband service, compared with 78% of urban consumers.



Connectivity on the move

Honotanga hāereere

- The mobile market is highly concentrated with the three largest providers – Spark, One NZ and 2degrees – holding 98.4% of the retail market.
- Four MVNOs are new to the market: Contact Energy Mobile, Nova Energy Mobile, Mighty Mobile, and Rocket Mobile (previously MyRepublic). This means a total of nine MVNOs currently serve the market.
- MVNO market share increased from 1.3% to 1.6%, following the entry of the four new players mentioned above.
- All three mobile operators are providing 5G services and continue to build out their 5G networks.
- Average 5G mobile coverage has increased to 27% of the population up from 18% in 2022.
- Average 3G and 4G coverage has remained steady at 98% of the population.
- An additional 29 tourism sites and 214km of state highway gained mobile coverage under the Government's Mobile Blackspot Fund to June 2023. Targeted improvements to state highway coverage are now complete and tourism sites are 79% complete.
- All three mobile operators have divested their mobile towers, consistent with global trends towards the sale of passive infrastructure by mobile providers.
- Average 5G download speeds are 251.6Mbps placing New Zealand in the Top 15 global markets in Opensignal's testing.
- Prepaid connections have increased by 2% bucking the trend away from prepaid and toward postpaid plans over the prior eight years. A variable factor influencing the trend will be the post-COVID return of travellers to New Zealand connecting to short term prepaid plans.

- Prepaid consumers use an average of 3.0GB of mobile data per month, compared to postpaid consumers, who use an average of 8.6GB per month.
- The price an average prepaid consumer needs to pay to meet their usage sits at the OECD average.
- "Endless" postpaid connections now make up 66% of all postpaid plans – up from 59% in 2022 – continuing a trend towards these plans over the past five years.
- The price an average postpaid consumer needs to pay to meet their usage is \$15/month higher than the OECD average.
- 60% of mobile consumers have been with the same provider for more than five years.
- Competitive pressure to provide better usage and spend information to consumers continues to increase, with Spark's Artificial Intelligence (AI)

 powered right plan initiative – "Made For You Review"– being the most recent development in this area.
- Our Customer Satisfaction Monitoring Survey shows that there is room for improvement in different aspects of service. Consumers are most satisfied with coverage and availability and least satisfied with customer service, consistent with the previous year.
- All three mobile operators have announced dates for their 3G shutdowns in the next two years.



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