



TCF Annual Report 2022

Telecommunications Enabling New Zealand's future



The New Zealand Telecommunications Forum (TCF) brings together the telecommunications industry to resolve regulatory, technical and policy issues. In doing so we enable the best possible outcomes for New Zealand consumers.

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A message from our CEO

This year has been a busy one for the NZ Telecommunications Forum (TCF), and indeed for the industry itself. As the Ultra Fast Broadband project and Rural Broadband Initiative reach the end of their deployment phase, attention has turned to retail service quality and how we, as an industry, can work together to enable the best possible outcomes for New Zealand consumers.

We've introduced two new codes. Firstly, the Broadband Marketing Code helps to ensure providers marketing broadband services present information such as technical and performance characteristics in a clear, accurate and up-to-date manner. This ensures consumers can compare offers between providers and also understand more clearly what each service delivers.

Secondly, we have introduced the Copper and PSTN Transition Code which sets out how providers who are transitioning their customers off copper services inform their customers about this process and the alternative technologies that are available. As we move to a world where copper services are being replaced by fixed wireless, mobile, fibre and even satellite services customers will naturally have questions about what is available to them. These codes will help spell that out.

This year, the TCF, in conjunction with the Commerce Commission, has published a consumer factsheet outlining details of the changes relating to Chorus' copper withdrawal and Spark's PSTN switch off. The aim is to provide consumers with clear information on what these activities will mean to copper services.

The industry is tackling consumer scams and fraud head on by reviewing the TCF Scam Prevention Code to expand its scope to include SMS text scams. The TCF is actively involved in ongoing consumer awareness campaigns and has implemented a twofactor authentication (2FA) step when consumers are switching mobile providers to ensure they approve the porting of their service from one provider to another. This has stopped fraudsters using porting as a way to access consumer bank accounts. Our partners in the banking world told us that by shutting down this channel it has had an instant impact in reducing this type of fraud.

To round out the year, the TCF is also reviewing the governance structure of the industry's Telecommunications Dispute Resolution (TDR) scheme. The TDR supports customers who have an issue with their service that they cannot resolve with their provider. The changes to the TDR scheme will implement improvements to the governance framework to ensure it operates independently of the industry, whilst focusing on consumer awareness and increasing membership.

Which brings us to the future – what will 2023 deliver, I wonder? Predictions are notoriously fraught, especially when they're about the future, but I expect to see demand for faster services soar, a greater focus on digital inclusion, and a growing awareness of the key role telecommunications plays in delivering a sustainable future for all New Zealanders.



Paul Brislen, CEO

New Zealand Telecommunications Forum (TCF)

Snapshot of New Zealand's telecommunications industry



86.2% of New Zealanders

can now access UFB, with 69% connected.¹



Homes with a landline fell 24%

Two-thirds of household fixed-line connections now have no voice service. For the remaining residential landlines, 16% are traditional copper phone line and 84% are modern technologies such as fibre and fixed wireless.²



9 RBI mobile cell towers

went live¹, and a further 10,048 rural homes and businesses were connected, along with 148km of new state highway coverage.¹



143 marae connected to broadband

with a further 166 marae with hardware installed¹



Mobile data average monthly usage grew 28%

while mobile calling grew 3% but texting was down 1%. Mobile connections rose by 9% to 5.3m.²



New Zealand ranked 4th highest

out of OECD countries for fixed wireless broadband connections. Fixed wireless connections have increased to 276,000 up 25% from 2020²



New Zealand ranked 6th in the world

in the Mobile Connectivity Index, retaining its top 6 ranking, four years in a row.³



New Zealand ranked 10th in the world

(up two places) in Ookla's latest global fixed broadband median speed rankings. $\ensuremath{^4}$

Sources: Crown Infrastructure Partners, Commerce Commission, GSMA Mobile Connectivity Index, Ookla's Speedtest Global Index

- 1. Crown Infrastructure Partners Quarterly Connectivity Reports (Apr 21 Mar 22 Collated Data)https://www.crowninfrastructure.govt.nz/about/publications/
- 2. Commerce Commission https://comcom.govt.nz/__data/assets/pdf_file/0019/279100/2021-Annual-Telecommunications-Monitoring-Report-17-March-2022.pdf
- 3. GSMA Mobile Connectivity Index https://www.mobileconnectivityindex.com/#year=2021&globalRankings=overall&globalRankingsYear=2021
- 4. Ookla's Speedtest Global Index https://www.speedtest.net/global-index

Our Digital Future

The telecommunications sector has a key role to play in enabling Aotearoa New Zealand's digital future. The internet access we provide is critical to all three pou of the Digital Strategy for Aotearoa¹ - growth, trust and inclusion. Without it our tech sector and other businesses can't function or grow and New Zealanders can't participate in our increasingly digital world.

Our members are stepping up to help meet the Government's goal for Mahi Tahi (digital inclusion). By the end of 2023, 98.8 percent of New Zealanders will have the ability to access improved broadband². And as the Government's thoughts turn from these substantial infrastructure achievements to digital equity, so do ours.

DIGITAL STRATEGY & EQUITY

As concerns about the cost of living, rising inflation and affordability of everyday items increases, the cost of telecommunication products and services has fallen consistently year after year. Statistics NZ Consumer Price Index ending March 2022 rose to 6.9 percent year on year.³ Yet during this time the cost of telecommunications equipment and services both fell - services reduced by 4 percent and equipment by 8.9 percent. But we still have a low-income problem. A large number of lowincome families in Aotearoa are struggling to afford the essentials, including the internet access they need at home: to learn, work, connect with friends and family, and access government services.

AS AN INDUSTRY WE ARE PLAYING OUR PART. OUR MEMBERS ARE:

- providing subsidised, low cost and free internet to families on low incomes, students, job seekers and refugees.
- supporting community initiatives that get laptops and tablets to people who can't afford them, including through device recycling.
- funding research to better understand the digital equity challenges we are facing, including the barriers to Māori participation and success in the New Zealand tech sector.
- helping to establish innovation hubs in Māori communities.

- engaging through Digital Equity Coalition Aotearoa.
- supporting government initiatives to help minimise the impact of digital inequity.
- supporting programmes that are helping youth, low-income families, Māori, Pacific, older New Zealanders, incarcerated persons and refugees to build digital skills and stay safe online. These range from introductory courses, to online wellbeing and safety issues, programmes that bring whānau together to learn together, and the more advanced digital skills for coding, game design and animation.

But we can only do so much in isolation. We need government investment and support in the digital equity essentials. This could include government led initiatives to help pay for internet at home or on the go. Equally important is funding NGO efforts to provide access to affordable devices, digital skills, and the wrap around support for people new to the digital world. All New Zealander's need to get connected, feel confident and stay safe online. As the Government develops this part of the Digital Strategy for Aotearoa, the telecommunications industry will be there to play its part. We are committed to working with government and communities on digital equity.

Sources:

- 2. Crown Infrastructure Partners Quarterly Broadband updates
- https://www.crowninfrastructure.govt.nz/wp-content/uploads/CIP-Connectivity-Quarterly-Report-December-2021.pdf 3. Statistics New Zealand consumer price index March2022

https://www.stats.govt.nz/information-releases/consumers-price-index-march-2022-quarter/

^{1.} Te Rautaki Matihiko mo Aotearoa The Digital Strategy for Aotearoa September 2022

Scams and Fraud

The TCF continues its programme of work combatting scams and fraudulent activity to support consumers. The TCF and its members work with government agencies and other sectors such as banking and community agencies to raise consumer awareness about scams and to block the fraudulent use of mobile and landline numbers.

Under the TCF Scam Prevention Code* providers must take proactive steps to avoid and reduce scams, as well as reactive steps to identify, verify and take action on scam calls and texts to both mobile phones and landlines. The TCF actively monitors its scam calling and text notifications to work collaboratively with key stakeholders in the banking and government sector to identify and block scam activity across the telecommunications networks.

Over the past 12 months, 2,208 scam fixed line call notifications have been sent via the TCF notification email for review and action.

The TCF is an active member of the Government's Consumer Protection Inter-Agency Fraud Working Group and supports Netsafe, CERTNZ and DIA in their expanding work to protect consumers.

As threat actors focus on new vectors such as social media, we will continue to support consumer education in this space.

SCAM AND FRAUD PREVENTION ACTIVITY:

- Regular Scam Updates.
 Mobile network operators actively engaging with DIA to receive regular updates on scams reported through their 7726 text number as part of their scam mitigation processes by investigating and blocking mobile text numbers.
- Implementation of twofactor authentication when consumers are switching mobile providers. This provides an extra layer of protection for consumers when porting their number from one provider to another. Mobile operators and banks have reported that the incidence of using porting as a mechanism to commit fraud has dramatically decreased.
- Identifying and blocking 0800 spoofing bank scam. This type of scam enables fraudsters to appear legitimate by using a bank's 0800 number as Caller ID, pretending to alert the consumer of an issue and convincing them to share personal and financial details. The TCF has initiated

a call block on these numbers from upstream carriers, who usually carry international traffic into New Zealand. This enables the banks to continue to use the 0800 numbers for their New Zealand customer base safely, whilst eliminating incoming international fraudulent activity.

- Cross sector and multiagency quarterly fraud seminars. These seminars cover scam combating initiatives as well as providing a forum where companies can share information on latest fraudulent trends in the banking and telecommunications sectors.
- Free mobile phone IMEI
 lookup service for customers
 to check if devices have
 been blacklisted before
 purchasing. Phones may
 have been lost, stolen or
 obtained through fraud.
 These blacklisted items will
 no longer work on any New
 Zealand mobile network. Find
 out more on our website:
 tcf.org.nz/imeicheck



Environmental Responsibility

Sustainable development is a key area of focus for the telecommunications industry. There is an increasing reliance on telecommunications for social connection, work and study. Using telecommunications in this way reduces transportrelated carbon emissions. Never before have we seen reliance on telecommunications more than through the Covid-19 pandemic.

COVID-19 CHANGES

The Covid-19 pandemic demonstrated the critical importance that telecommunications infrastructure plays in keeping businesses, governments, and communities connected and running. Because of the economic and social disruption caused by the pandemic, people around the world relied on telecommunications for information, for social connection, and to work or study from home¹. The effects of this can't be overstated and will be ongoing. Hybrid working styles mean more people are opting to work remotely and therefore travelling less, working towards a reduced carbon footprint. Learning, either for a hobby or professional development, can now be accessed through remote online webinars and courses. Our telecommunications network is the backbone to enabling this new normal. These new technologies bring important environmental gains as well as social benefits.

"Our work supports Aotearoa New Zealand's transformation to a high productivity, low-carbon economy."

INFRASTRUCTURE CHANGES

Upgrading and maintaining our infrastructure is key to continue providing telecommunications services as demand continues to increase. Our work supports Aotearoa New Zealand's transformation to a high productivity, low-carbon economy.

Updating the infrastructure from the old copper network to fibre technology also has major environmental benefits.

The latest Sapere Research Group Report found that an entry-level fibre plan, 50 Mbit/s, is up to 41 percent more efficient than a copper VDSL service.²

As New Zealanders consume more and more data and demand increases for faster speeds to support an increasingly online lifestyle, the fibre network will help ensure the development and growth of the industry is a sustainable one.

PRODUCT STEWARDSHIP

The TCF's product stewardship scheme, RE:MOBILE, collects and recycles unwanted mobile phones in partnership with the mobile network operators: 2degrees, Spark and Vodafone. Proceeds are donated to the New Zealand charity Sustainable Coastlines.

In the 2022 financial year, RE:MOBILE collected 66,867 mobile devices; saving approximately 12 tonnes of hazardous waste, including lithium ion batteries, from going to landfill.³ These phones are either refurbished and onsold to emerging markets, or recycled, with over 96 percent of components re-used in the circular economy.



Over **669,900** mobile phones collected since 2014





259 tonnes of carbon dioxide emmissions prevented



120.1 tonnes of waste diverted from landfill



Over **\$196,900** raised for Sustainable Coastlines since 2014

Sources

1 International Finance Corporation COVID-I9's Impact on the Global Telecommunications Industry https://www.ifc.org/wps/wcm/connect/ld490aec-4d57-4cbf-82b3d6842eecd9b2/IFC-CovidI9-Telecommunications_final_web_2.pdf?MOD=AJPERES&CVID=n9nxogP

2 Sapere Research Group Report https://srgexpert.com/wp-content/uploads/2021/12/Assessing-the-emissions-footprint-of-the-fibre-networks-relative-to-other-fixedbroadband-options-in-NZ-Corina-Comendant-and-Kieran-Murray-November-2021.pdf

Resilience

The telecommunication sector is a Lifeline Utility under the Civil Defence Emergency Management Act 2002. The reliance and expectations of New Zealanders to stay connected in today's economic and social climate cannot be underestimated. The goal of the industry is always to ensure any disruption to a customer's telecommunication service is minimised and that outages are repaired as quickly as the situation allows.

COMMITMENT TO RESILIENCE THROUGH THE TCF

The TCF produced a snapshot study in May 2022 on the physical resilience of the networks and services and how the industry responds to significant disruptive events. The report looks at the overall resiliency of the telecommunications sector and the factors that build towards a balanced and considered level of resiliency through mechanisms such as investment, regulation, competition and collaboration.

The TCF will develop a telecommunications emergency management response plan through the Telecommunications Emergency Forum. This plan will set out the industry's response to provide assurance to central and local government about the level of preparedness and resiliency across the sector.

The telecommunications industry has a proven track record of working together to provide a robust collaborative response to restore services as soon as possible following disruptive events. The challenge is in preemptively mitigating these scenarios and it is in this space that the TCF believe efforts to improve resiliency could achieve the greatest impact for consumers.



TELECOMMUNICATIONS EMERGENCY MANAGEMENT RESPONSE PLAN.

- Prioritising access to telecommunications sites during emergencies.
- A nation-wide process that includes priority supply of fuel and equipment to telecommunication providers to restore services.
- Optimising how we enable sharing of surviving network capacity to normalise services into an impacted region of New Zealand.
- A sector-wide crisis exercise programme focused on various probable natural disasters.
- Agreeing principles for engaging with local and regional Lifeline Utility Groups, to consider how we might ensure a consistent approach that improves public outcomes and more efficient engagement.
- Establishing a communication plan with local and central government to keep informed on research work being commissioned and seek consultation and engagement.

Dec 2019 South Canterbury. The results of climate change in South Canterbury causing extensive flooding and rivers to become swollen. This highlights the importance of a collaborative approach to improve resiliency of telecommunications assets and services across the country.

CONSUMER FOCUS

An important area of the TCF's work is to improve consumer outcomes to enable consumers to get the best out of their telecommunication services:

CUSTOMER EDUCATION

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Communicating telecommunication news and updates through social channels (Twitter/Linkedin/Facebook)

Mobile handset blacklist check on TCF website - IMEI look up service

Information and Educational updates, newsletters and blogs on the TCF website

CUSTOMER SUPPORT

The Telecommunications Dispute Resolution Scheme (TDR) is a free and independent service to customers and is mandatory for all TCF members to join.

The 111 Contact Code ensures registered vulnerable customers have an alternate means to call 111 in an emergency.

CUSTOMER CHOICE

Facilitating number porting between service providers

Framework developed through the **TCF Broadband Marketing Code** for marketing broadband services to consumers

Standardised how broadband plans are presented to customers through the **TCF Broadband Product Disclosure Code**

TCF Copper and PSTN Transition Code developed to ensure providers communicate the range of options to their customer when transitioning them off their copper-based services

Easy recycling options for mobile handsets through the **RE:MOBILE mobile phone recycling scheme**

The TCF developed a standardised framework for sharing mobile plan information with comparison tool providers - another example of industry supporting customer choice.

CUSTOMER PROTECTION

Facilitating cross industry initiatives to combat scams and fraudulent activity.

• TCF Scam Prevention Code established for operational processes to monitor and respond to scam, by blocking numbers to limit possible harm to consumers.

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About the TCF:

The TCF plays a vital role in bringing together the telecommunications industry to resolve regulatory, technical and policy issues. We actively foster co-operation and collaboration among the telecommunications industry and across other sectors and government. It provides a forum in which industry experts can create practical, efficient solutions to issues and develop industry codes. Members include over 95 percent of the telecommunications industry by customer numbers.

TCF ROLE AND ACTIVITIES

Representing the telecommunications sector at the highest levels

Representing the industry's views on a range of important issues

Developing industry codes of practice

Helping the sector grow and develop through self-governance

Working with government on key policy initiatives

Promoting the importance of telecommunications as a vital utility and an essential service

Coordinating and facilitating working groups

A united voice for our members, who represent network operators, retailer service providers and mobile operators.

Through **our mahi** - we enable the **best possible outcomes** for New Zealand consumers.



Working party projects 2021/22

The TCF work programme focusses on a number of initiatives aimed to improve outcomes for consumers of telecommunications services and deliver better solutions across the telecommunications industry.

The TCF facilitates working groups made up of subject matter experts from its membership and key stakeholders. The outputs are published on the TCF website and made available to the wider industry.

TCF PROJECTS UNDERWAY OR COMPLETED OVER THE LAST YEAR INCLUDE:

- **ABANDONED CONNECTIONS CODE:** New code development started with the purpose of improving the process for customers when moving house and reconnecting their telecommunications services at their new property.
- **BROADBAND MARKETING CODE:** This new Code, published in April 2022, requires providers who market broadband services to ensure the technical and performance characteristics of the broadband service are presented in a clear and consistent way, and stay up-to-date with the latest Measuring Broadband Report.
- BROADBAND PRODUCT DISCLOSURE CODE: This Code was updated in April 2022 to include fixed wireless services and specifies minimum standards for the disclosure of information regarding residential broadband plans for consumers.
- MOBILE PLAN COMPARISON TEMPLATE: The TCF developed a framework template to facilitate the provision of mobile service information when used for comparison. The framework also gives guidance to online comparison sites to ensure mobile plans are presented fairly and accurately for comparison to consumers.
- **CONSUMER DATA RIGHT (CDR):** regulatory overview within the context of the New Zealand telecommunications environment. This was provided to the Commerce Commission and government, with the view that this may inform future CDR policy.
- **MOBILE MESSAGING CODE:** Updated in November 2021. This brings the Code in-line with current operational and regulatory obligations. The mobile messaging sector must operate in a responsible and compliant manner when delivering mobile messaging services to consumers in New Zealand.
- NUMBER PORTABILTY TWO FACTOR AUTHENTICATION: In partnership with the banking sector, the TCF delivered improved two factor authentication to protect consumers and combat fraudulent activity using number portability functionality.
- **PREMISES WIRING GUIDELINES:** The revised Premises Wiring Guidelines were published in September 2021 and sets out clear guidelines for cable installers and home owners when installing and connecting telecommunications services within a premises.
- **PRODUCT STEWARDSHIP:** A project has commenced to align the existing TCF RE:MOBILE scheme with the new accreditation process and requirements developed by the Ministry for the Environment under the Waste Minimisation Act 2008.

- **TELECOMMUNICATIONS DISPUTES RESOLUTION SCHEME (TDR) REVIEW:** The TCF is implementing a number of improvements to the TDR recommended in the Commerce Commission's 2021 Review of the TDR Report. The TDR is a free and independent service available to telecommunication consumers when they have an unresolved dispute with their provider. All TCF members are members of the TDR.
- **TELECOMMUNICATIONS RESILIENCE:** The TCF reported to the Minister on the current state of resiliency in the telecommunications sector. The TCF continues to work with the Ministry of Business, Innovation and Employment and the National Emergency Management Agency on future investment and development of a telecommunications emergency response plan.
- SCAM CALLING CODE: The TCF has commenced a review of the Scam Calling Code, now referred to as the Scam Prevention Code, to improve the operational process for identifying and blocking scam traffic targeting New Zealand consumers. The scope of this code has also been expanded to include SMS text scams.
- VULNERABLE END USER CODE: This is a new code under development will ensure that vulnerable end users are given additional help and support they need through the management of their fixed line telecommunications services. This code will align with the Commerce Commission's 111 Contact Code.





TCF codes, standards, schemes and current projects at a glance 2021

		SUPPORTING SECTOR		
DOCUMENT	PURPOSE	CONSUMERS	GOVERNMENT	INDUSTRY
	Codes			
Broadband Marketing Code 2022	The purpose of this Code is to set out the key principles, providers should adhere to when marketing broadband Telecommunications Services to Consumers.	•		•
Broadband Product Disclosure Code 2022	This Code provides minimum standards of information on how fixed line, mass market broadband services are described to consumers, to allow consumers to more easily compare broadband plans between service provider. Includes guidelines for traffic management and service restrictions.	•		•
Code Compliance Framework Code	Describes the framework to enable the industry to self-regulate through its compliance regime with TCF Codes to increase consumer and regulatory confidence in the provision of telecommunications services.	•		•
Copper and PSTN Transition Code 2022	Sets out requirements that RSPs must meet when their customers are transitioning away from copper-based services due to copper withdrawal, PSTN switch off or a commercial decision means copper services will no longer be available in that area.	•		•
Co-siting Code 2007	To enable a cooperative approach to co-siting radio and mobile communications equipment applies where the landlord requires the consent of the original party before granting rights to the co-siting party.			•
Customer Complaints Code (TDRS) 2021	To enable the prompt, effective and independent resolution of customer complaints and to identify systemic issues arising from disputes and determinations.	•		•
Customer Transfer Code – (Copper) 2013	Approved telecommunications access code. To facilitate a seamless transfer of a customer's telecommunications services between retail service providers that is consistent with the purpose and provisions of the Telecommunications Act.	•		•
Customer Transfer Code Fibre Services 2022	To define the process for transferring a customer's fibre telecommunications services between retail service providers, and to ensure that this is a seamless process for the customer.	•		•
Disconnection Code 2017	Set out disconnection standards to enable Providers to develop and implement fair and consistent disconnection policies to their residential customers.	•		•
Emergency Services Calling Code 2022	To specify call quality and customer information standards for voice calls to emergency services to improve the delivery of emergency calls and promote user confidence in emergency services calling.	•	•	•

		SUPPORTING SECTOR		
DOCUMENT	PURPOSE	CONSUMERS	GOVERNMENT	INDUSTRY
Fibre Installation Code 2020	To ensure nationally consistent processes for the installation of fibre services at a consumer's premises by describing an agreed set of requirements during the end-to-end customer journey to deliver the agreed good customer experience.	•		•
IMEI Blacklisting Code 2019	To discourage the theft and fraudulent acquisition of mobile handsets by disconnecting the handsets from all mobile networks in NZ and some overseas jurisdictions. Applicable to only mobile network operators.	•		•
International Mobile Roaming Code 2018	To help raise awareness of consumers of IMR services about tariffs and likely costs for mobile roaming.	•		
Mobile Messaging Services Code 2021	To encourage the responsible delivery of mobile phone messaging services that are compliant with legal and regulatory obligations.	•		
Product Stewardship Scheme Under Review	Operational requirements for the RE:MOBILE product stewardship scheme for the re-use and recycling of mobile phones.	•		
Scam Call Prevention Code Under Review	Sharing of scam calling and text messaging information to enable the policing of phone and text scammers and reduce the number of scams operating in New Zealand and reaching consumers.	•		•
Unauthorised Use of Mobile Phones in Prisons Code 2008	To provide an agreed basis upon which the unauthorised use of mobile phones in prisons can be controlled through the use of interference generating transmitters or "jammers".		•	
	Industry Guidelines and Standards			
Community Engagement for Telecommunications Infrastructure Guidelines 2018	Industry guidelines to assist wireless network operators with their community engagement obligations in relation to new or upgraded wireless facilities.	•		•
International Revenue Share Fraud Guidelines 2016	Guidelines to enable a collaborative approach across international boundaries to reduce or eliminate the incidence and effects of IRSF on Australasian telecommunications providers and their customers.	•	•	•
Interception Guidelines 2009	To assist network operators and service providers in complying with the Telecommunications (Interception Capability) Act in an efficient, timely and cost-effective manner.		•	•

To provide a baseline network-to-network interconnection standard that Interconnection of Voice over enables New Zealand network operators to interconnect IP networks, Internet Protocol primarily for the carriage of voice over internet protocol calls. For UFB services it applies to the ATA port delivered by the LFC on the ONT. (VoIP) Technical Standards 2012 Under Review **Premises Wiring** Guidelines for the sector installing generic or structured **Guidelines** for cabling (including fibre optic) for telecommunications services installers & in residential/business and multi-dwelling unit premises. consumers 2021

Information to consumers on residential premises wiring to support the latest telecommunication technologies within the home.

		SUPPORTING SECTOR		
DOCUMENT	PURPOSE	CONSUMERS	GOVERNMENT	INDUSTRY
Principles for Telecommunications Infrastructure for new Subdivisions 2010 Under Review	To provide Local Government Authorities with guidelines for minimum standards for developers when telecommunications infrastructure is being installed in new sub-divisions.		•	
UFB Ethernet Access Standards 2017	To provide a minimum set of requirements for the industry to deliver UFB Layer 2 services across the UFB network, and to define the supporting service level terms key principles.	•		•
UFB OSS BSS Business Interaction Framework 2014	To define minimum requirements to deliver UFB OSS/BSS processes in a consistent manner across all four LFCs. These specifications are drafted into the 'UFB Business Interaction Framework' document.			•
	Ongoing Forums & Working Parties			
Communications Working Party	To assist with moving public understanding of the economic, environmental and social contribution of the telecommunications industry. Identify and implement initiatives to support and educate consumers.	•	•	•
Fraud and Revenue Assurance Working Party	To work collaboratively to reduce harm to consumers as a result of fraudulent activity across telecommunications services.	•	•	•
Local and Central Government Infrastructure Standards Working Group	To facilitate better communication and collaboration with councils and government in general on matters relating to the telecommunications sector (planning, infrastructure build, processes with LGNZ)	•	•	•
Number Portability: • Number Portability User Group • Regulatory & Policy	The Number Portability User Group is an operational and technical industry group which meets regularly to address technical and process operational issues regarding number portability. The Regulatory & Policy Group works to develop industry views on regulatory issues that arise from number portability as a regulated service.	•		•
Regulatory Committee	To respond to changes in the telecommunications industry regulatory environment and consider a regulatory strategy to achieve the industry's agreed outcomes.	•	•	•
TDR Council	To oversee the Telecommunications Dispute Resolution (TDR) scheme and ensure the prompt resolution of customer disputes and to identify any systemic issues that may arise.	•	•	•
UFB Product Forum	To provide a platform for the industry to discuss fibre-related matters, products and services and facilitate stakeholder engagement between Retail Service Providers and Network Operators.	•	•	•
	New Codes in Progress			
Abandoned Services Code	To enable the connection of end user's copper or fibre telecommunications services when they are moving house and transferring their telecommunication services to their new property when intact services are still connected at that property.	•		•

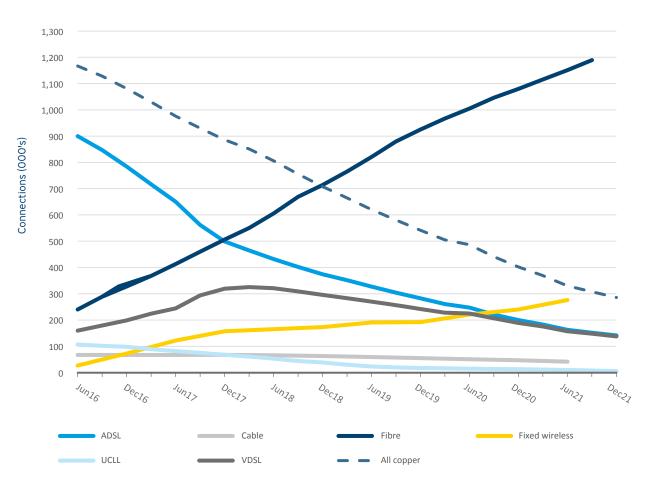
VulnerableTo support vulnerable customers and ensure they are not undulyConsumer Codeplaced at risk through changes or failures of their fixed line service.

Our members



Appendix

Telecommunication's Trends



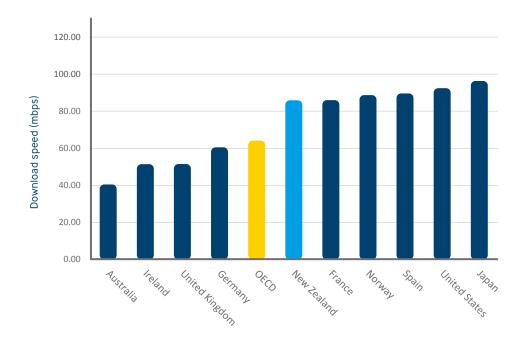
Fixed Line Connections

Source

Commerce Commission Annual Telecom Monitoring report 12 March 2022¹

FIXED LINE CONNECTIONS

In the year to 30 September 2021, total copper broadband connections dropped by 30 percent to 308,000, split between 152,000 ADSL connections, 148,000 VDSL connections, and 8,000 unbundled copper local loop connections. This continues an ongoing trend of copper broadband connections dropping while fibre and fixed wireless broadband connections rise.



Average Broadband download speed

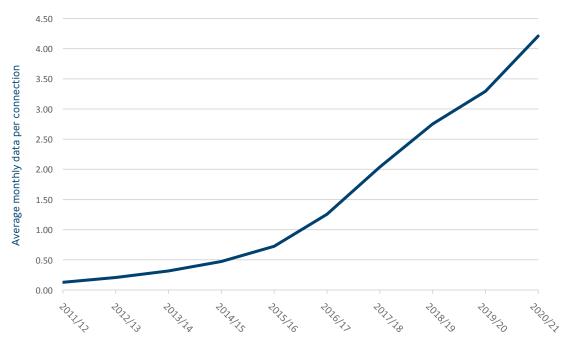
Source Commerce Commission Annual Telecom Monitoring report 12 March 2022¹

AVERAGE BROADBAND DOWNLOAD SPEED

New Zealand's average fixed broadband download speeds exceed average speeds in Australia, Ireland, the UK, Germany and the OECD average of 64Mbps.

In 2021, New Zealand ranked 11th in the OECD, with average fixed broadband download speeds of 86Mbps up from 67Mbps in 2020.





Mobile data consumption

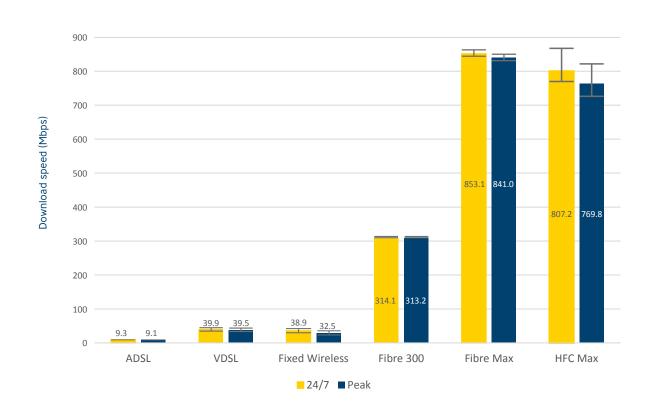
Source

Commerce Commission Annual Telecom Monitoring report 12 March 2022¹

MOBILE DATA CONSUMPTION

The amount of data consumed over mobile networks by retail customers continued to grow in 2021. The average amount of mobile data consumed per connection is now 4.21GB per month, up from 3.29GB per month in 2020.





Average broadband download speed by plan

Source Measuring Broadbar

Measuring Broadband New Zealand Spring Report, March 2022²

AVERAGE BROADBAND DOWNLOAD SPEED BY PLAN

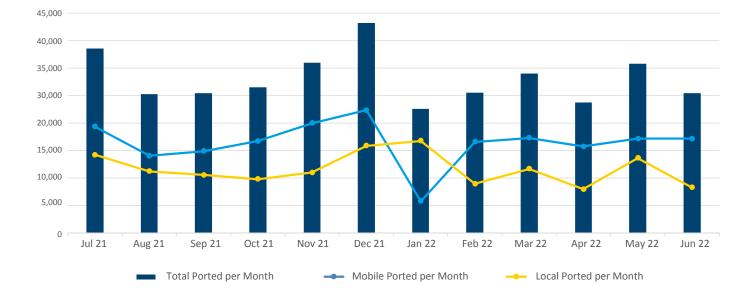
The Commerce Commission's Measuring Broadband New Zealand (MBNZ) programme uses hundreds of probes in the network to assess real world speeds and makes sure customers get what they pay for. This report, based on information from independent testing partner SamKnows, provides a breakdown of the broadband speeds by technology in New Zealand.

Sources:

2. https://comcom.govt.nz/regulated-industries/telecommunications/monitoring-the-telecommunications-market/monitoring-new-zealandsbroadband/Reports-from-Measuring-Broadband-New-Zealand

^{1.} https://comcom.govt.nz/__data/assets/pdf_file/0019/279100/2021-Annual-Telecommunications-Monitoring-Report-I7-March-2022.pdf

Porting Activity



Switching providers

Net Porting Activity

SWITCHING PROVIDERS

Every week, the TCF IPMS system handles almost 10,000 porting events, requiring changes to network routing for 12 different networks and updated records and call handling for more than 30 providers; all ensuring that the vast majority of users can use their new service with their old number within a matter of hours.

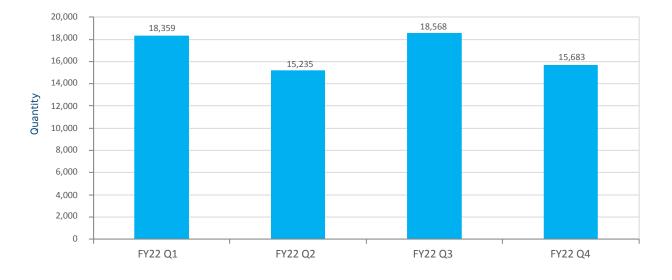
The TCF tracks the porting of numbers month to month, and displays the results here on a quarterly basis.



Product Stewardship

Re:Mobile - Total number of mobiles collected

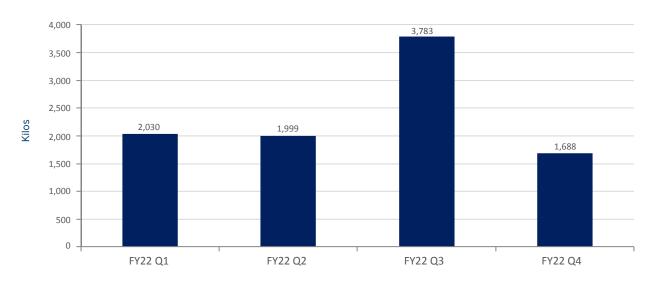
Including through buy back schemes FY2022



RE:MOBILE - TOTAL NUMBER OF MOBILES COLLECTED

In the year 2021/2022 the total number of devices collected through buy-back schemes and for recycling totalled 67,845





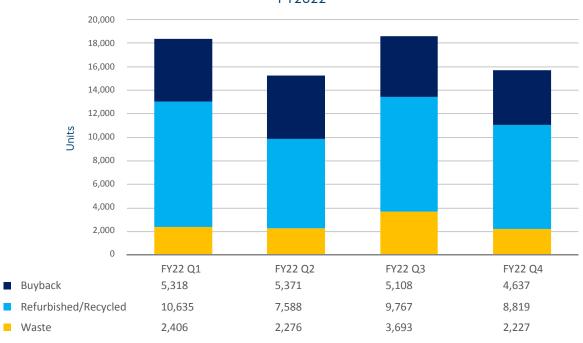
Re:Mobile Total kgs diverted from landfill



FY2022

RE:MOBILE - TOTAL KGS DIVERTED FROM LANDFILL

The total weight of waste diverted from landfill in the year 2021/2022 was just over 9,500kg.



Re:Mobile Collection Results by Type FY2022

RE:MOBILE COLLECTION RESULTS BY TYPE

The above graph shows the number of phones collected by buyback/refurbished/waste: In total during 2021/2022 financial year 30 percent of phones were recycled through buyback schemes (20,434), 54 percent through refurbishing or recycling schemes (36,809), and only 16 percent went to waste (10,602).





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