TCF Annual Report 2019

TELECOMMUNICATIONS

ENABLING NEW ZEALAND'S FUTURE

TCF

NZ TELECOMMUNICATIONS FORUM INC

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A MESSAGE FROM OUR CEO

While the industry comes to terms with the new retail regulatory regime which was introduced with the amendments to the Telecommunications Act (the Act) at the end of 2018, the last year has seen the TCF continue to focus on improving outcomes for consumers through the development of consumer-facing industry Codes.

An example of this is the Fibre Installation Code, which will come into effect by the end of 2019. The Code establishes nationally consistent standards to deliver a good customer experience when communicating, installing and connecting a new residential Fibre Fixed Line Access Service.

The 2018 changes to the Act introduced a new regulatory regime for telecommunications wholesale services, as well as retail services. The TCF is currently working through the implications of the new retail regulatory regime for the industry. The Act retains an industry self-regulatory approach to improving customer service, with the backstop of the Commerce Commission (Commission) stepping in if it considers that what the industry has done is insufficient. It will be some time before the final shape of this new regime becomes clear.

As the UFB roll-out continues at pace, the demand for copper broadband and voice services is reducing. Under the Act, the Commerce Commission is responsible for establishing a regulatory process that will allow Chorus to power down copper services in areas where a replacement fibre service is available.

The TCF is working collaboratively with the Commission and the wider industry to ensure that consumers are not adversely impacted. There are three requirements that need to be in place before Chorus can start ceasing the provision of copper fixed line services to end-users.

First, the Commission is required to specify the areas of the country with access to fibre. Secondly, the Commission must establish a Copper Withdrawal Code. This code will set out the approach Chorus and the retailers will take, including how consumers are protected, before copper services are switched off in the places the Commission identifies as specified fibre areas.

Finally, the Commission's 111 Contact Code must be in force to protect vulnerable consumers by ensuring they have reasonable access to contact 111 emergency services in the event of a power failure at their home.

The three requirements are due to be in place by June 2020. Once ratified, Chorus will be able to progressively identify areas where strong fibre uptake demonstrates it is sensible to power down the copper network. There are no plans for an indiscriminate switch-off of the copper network. Instead, Chorus and the retailers will work closely with the affected consumers to complete the migration to fibre in accordance with the Copper Withdrawal Code.

The TCF will continue to work collaboratively with the Commission and the industry to ensure there is a smooth transition to fibre for New Zealanders.

The industry has had to adapt to increased consumer demand for data, which has been driven by events and entertainment that were formerly broadcast, but are now being delivered via streaming apps. The speed with which new products and applications can influence demand make for a challenging environment for the industry.

Crime prevention continues to be a major focus for the TCF, with scam calls an on-going issue for consumers. As scamming is a problem which transcends the telecommunications industry, the TCF has been working with a range of other organisations to tackle this, including the NZ Police, the Ministry for Business, Innovation and Employment, CERT and Netsafe.

The rollout of 5G is expected to commence in the next year, however, there is currently active lobbying by a small but vocal section of the population worried about the perceived health impacts of radiofrequency (RF) electromagnetic energy (EME) emissions. This is a difficult topic for the industry to tackle, as some consumers are not always willing to believe industry when it comes to such issues. A definitive, objective assessment comes from the Ministry of Health's Interagency Committee on the Health Effects of Non-Ionising Fields. In its most recent report (November 2018), the Committee concluded that the existing New Zealand standards for RF exposure (which are already very conservative as they incorporate large safety factors) are sufficient for 5G technology, noting that existing health effects research already covers all the frequency bands anticipated to be used for 5G.

The coming year will be an interesting time for the telecommunications industry with many changes on the horizon, including regulatory changes and service delivery. I would like to thank everyone who has contributed to the TCF's work over the past year. All TCF members have played a valued role in our projects and we could not do this without you.

Geoff Thorn, CEO
New Zealand Telecommunications Forum (TCF)

SNAPSHOT: NEW ZEALAND'S TELECOMMUNICATIONS INDUSTRY

Nearly 1.4 million end users are currently able to connect to UFB, with 51% uptake

Improved broadband and mobile coverage will be available to 99.8% of New Zealanders by 2023

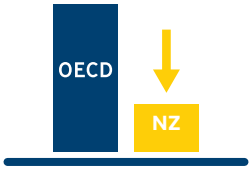
Fixed line data usage has been increasing on average by nearly half each year since 2010

Over 70% of fixed line broadband plans have no data cap

Over 40% of household fixed-line connections now have no voice service

New Zealand is ranked second on the global Mobile Connectivity Index

There are 6.4 million current mobile connections in New Zealand



The cost of New Zealand's mobile plans are 20% – 36% cheaper than OECD average

Average monthly mobile data usage has increased by 69% since 2017

TELECOMMUNICATIONS: ENABLING NEW ZEALAND'S FUTURE

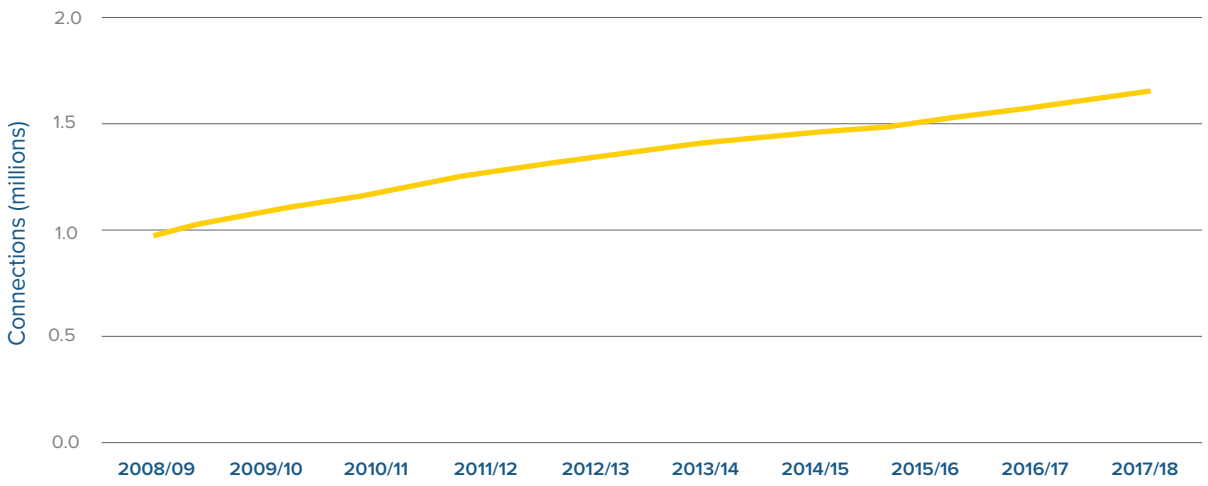
COVERAGE AND CONNECTIVITY

The industry is working towards achieving the Government's updated policy goal of improved broadband and mobile coverage for 99.8 percent of the population by 2023. This level of new infrastructure build and investment, combined with the unprecedented demand for new connections, has required the industry to implement innovative processes for delivering rural connectivity.

The Government's ultra-fast broadband (UFB) rollout is three percent ahead of schedule with 79 percent of the rollout complete. Nearly 1.5 million users are now able to connect to the fibre network. Currently, about half of New Zealand homes and businesses have connections to broadband across the 121 centres where ultra-fast broadband is available. The UFB infrastructure is due to be fully complete by 2022.

The TCF has worked with industry members to develop the draft Fibre Installation Code which establishes nationally consistent processes for the ordering and installation of fibre to ensure a good customer experience. New Zealand's broadband service providers, fibre companies and technicians have already adopted most of the practices outlined in the code, so the code, which will come into effect in late 2019, will formalise the process.

Growth in Fixed Broadband Connections



Mobile networks cover more than 97 percent of places where people live, work and play (based on population), and this coverage continues to increase. Mobile internet connectivity has been widely established as a key enabler of social and economic development, and internationally, New Zealand is ranked second on the global mobile connectivity index, which includes factors such as infrastructure, affordability, and available services. New Zealanders are increasingly relying on their mobile phones for uses beyond calling with mobile data usage increasing by 69 percent in 2018.

The rollout of 5G is expected to commence in the next year, however, there is currently active lobbying by a small but vocal section of the population worried about the perceived health impacts of radiofrequency (RF) electromagnetic energy (EME) emissions. This is a difficult topic for the industry to tackle, as some consumers are not always willing to believe industry when it comes to such issues. A definitive, objective assessment comes from the Ministry of Health's Interagency Committee on the Health Effects of Non-Ionising Fields.

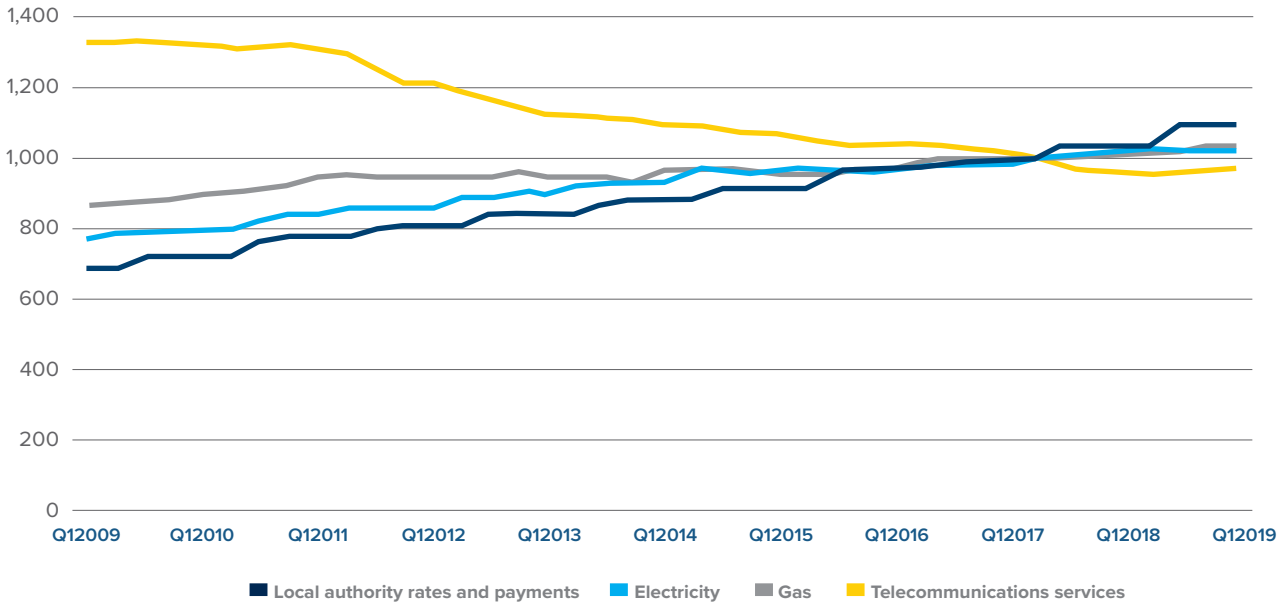
In its most recent report (November 2018), the Committee concluded that the existing New Zealand standards for RF exposure (which are already very conservative as they incorporate large safety factors) are sufficient for 5G technology, noting that existing health effects research already covers all the frequency bands anticipated to be used for 5G.

A challenge the industry faces when it comes to providing the 99.8 percent connectivity for New Zealand is the lack of national consistency in planning standards across the country. In order to deliver their services, the fixed line and mobile network operators have to deal with the plethora of local and territorial authorities for planning and consents. The TCF has been supporting work which encourages consistent national standards for planning and resource consents.

COSTS FOR CONSUMERS

The latest Statistics New Zealand Consumer Price Index shows that while there has been an overall increase of 1.5 percent for the year of Q12018 to Q12019, telecommunications services have risen by only 0.6 percent. Comparatively, household energy has risen 2.7 percent and property rates and related services has risen by 4.6 percent.

Consumer Price Index: Telecommunications vs. Utilities



New Zealand's mobile phone services are significantly cheaper than other countries, ranging between 20 and 40 percent below the OECD average. High mobile users have seen the biggest decrease, with prices for high usage monthly plans on average $35 cheaper than in 2017.

The cost of broadband in New Zealand is generally lower than the OECD average, with the cost for consumers on unlimited fixed-line broadband and voice services (with speeds of 100 Mbps) nine percent less than the OECD average.

CUSTOMER SERVICE

An important area of the TCF's work is to improve consumer outcomes, and to provide support and education to enable consumers get the best out of their telecommunication services.

TCF services offered directly to consumers include:

- Education about the telecommunications industry through the TCF website and Let's Talk Telco Facebook page
- IMEI look up service on the TCF website to check if a mobile handset has been blacklisted
- Requiring all of its members to join the free and independent Telecommunications Dispute Resolution Scheme (TDR)
- RE:MOBILE mobile phone recycling scheme
- Facilitating number porting to allow consumers to change service providers while still keeping the same phone number.

Consumers have benefitted from the current self-regulatory model where the industry has developed codes to improve customer service, such as the Broadband Product Disclosure Code and the Customer Complaints Code. However, changes to the Act have introduced a new Retail Service Quality regime, which the Commission has oversight of. This allows for either the industry or the Commission to develop Retail Service Quality Codes which are intended to improve the quality of retail services provided by the industry. Once the new regime is put in place by the Commission, the TCF will evaluate its Codes against the requirements of a Retail Service Quality Code.

ENABLING CHOICE

Ensuring that consumers have a choice of telecommunications service providers is imperative to a competitive industry.

The TCF facilitates Local and Mobile Number Portability (LMNP) which gives New Zealand consumers and businesses the ability to keep their existing local or mobile phone number if they change service providers. Since the inception of LMNP in 2007, over 4.5 million fixed and mobile numbers have been ported. Most consumers find the process of switching providers simple; a Commerce Commission study reported that only 19 percent of mobile consumers said switching providers is difficult.

With the increase of technology, products on offer, and bundling of services, it is important that consumers can understand the industry jargon in order to make an informed decision when selecting products and changing service providers. Broadband Product Disclosure, an initiative by the TCF, provides increased transparency across the industry, and requires fixed line broadband service providers to publish information about the costs and delivery of services they provide in a standard format. This allows consumers to make more informed decisions when it comes to their choice of service provider. This Code will likely be expanded to include all broadband services, such as fixed wireless, when it is next reviewed.

CRIME PREVENTION

Crime prevention is a key area of focus for the TCF. Telecommunications related crimes include handset theft, fraud and scams. Members of the TCF work collaboratively with the New Zealand Police, Netsafe, CERTNZ and other industry bodies to reduce the impact of crime on communities.

The industry's blacklisting service prevents criminals profiting from phone theft. Devices that have been lost, stolen or obtained through fraud are blacklisted and will no longer work on any New Zealand mobile network. The TCF provides a free look-up service via its website, so consumers can check the IMEI number of a handset to see whether it has been blacklisted, before purchasing it.

Scam calls continue to be an issue for consumers. The TCF has a Scam Calling Prevention Code which created a consistent approach to identifying, verifying, and blocking scam calls. To further enhance this, the TCF is working with CERT, Netsafe and IRD to enable them to provide scam call notifications directly to telecommunications service providers so those numbers can be blocked.

In addition to this, the TCF has been working with the Interagency Fraud Group (IFG) consisting of representatives from MBIE, NZ Police, Department of Internal Affairs, CERT, Netsafe, the Commission for Financial Capability and others on initiatives that can help educate and protect consumers from internet and phone fraud. An example of this is the Fraud Awareness Week social media and public relations campaign which ran in November 2018.

EMERGENCY SERVICES

In order to ensure that consumers always have access to emergency services, the TCF Emergency Services Calling Code guarantees that people can make a 111 call at any time, even if their mobile network is down or they have been disconnected for any reason, their account is out of credit or their mobile phone doesn't have a SIM card.

To help emergency services reach people in need more quickly, the industry has assisted with the development of a caller location system for 111 mobile phone calls, aiming to improve public safety and save lives. The system automatically provides emergency services with a precise location of a 111 caller.

The TCF has recently established a cross-agency working party to enhance the cooperation between the NZ Search and Rescue (NZSAR) Coordinating Authorities, Police and the telecommunications industry to improve NZSAR outcomes for New Zealand. Providing cell phone location data may help to reduce the time it takes to rescue persons in distress, which means greater success rates and more efficient deployment of resources. The working party will focus on resolving important issues relating to privacy and validating that requests for location information are appropriately authorised.

In 2017 the Civil Defence Emergency Mobile Alert system was launched. Facilitated by the telecommunications industry, this system uses cell broadcast technology to send alerts of potential natural disasters to people within range of the emergency's location. A nationwide test alert was sent in November 2018.

ENVIRONMENTAL RESPONSIBILITY

Sustainability and product stewardship are key areas of development across the telecommunications industry. The TCF's product stewardship scheme, RE:MOBILE, is accredited by the Ministry for the Environment. The scheme collects and recycles unwanted mobile phones in partnership with mobile network operators 2degrees, Spark and Vodafone, and recycling partner SwapKit. Proceeds are donated to New Zealand charity Sustainable Coastlines.

In the 2018 financial year, RE:MOBILE collected 82,842 unwanted devices; saving more than nine tonnes of hazardous waste, including lithium ion batteries, from going to landfill. These phones are either refurbished and on-sold to emerging markets; or recycled, with over 96 percent of components re-used in the circular economy. Since 2016, over $100,000 generated by the scheme has been donated to charity partner Sustainable Coastlines.

RE:MOBILE has been approved for funding from the Ministry for Environment through its Waste Minimisation Fund to run a RE:MOBILE promotional campaign in 2019. This will include a rebuild of the RE:MOBILE website, creating dedicated social media channels and a mass media campaign. The main focus of this campaign will happen in October to coincide with International E-Waste Day.

In addition to mobile phones, other electronic waste (e-waste) is also of concern to the industry. As a result, the TCF E-waste Working Party has reconvened in order to provide a unified and effective telecommunications industry voice on e-waste. E-waste covers customer premise equipment such as modems as well as network infrastructure waste.

The working party will review current recycling programs for industry waste streams and identify possible industry-wide reporting, enabling comparison and data analysis. This working party will also aim to develop an industry-wide electronic waste disposal programme.

Key Highlights

82,842
phones collected (that's over 1,500 a week)

88%
consumers
agreed that phone recycling helps save valuable materials from ending up in landfill

9+ tonnes
potentially harmful subtsances diverted from landfill

CONSUMER COMPLAINTS

If customers have issues relating to their telecommunications services, they are able to make a complaint to the Telecommunications Dispute Resolution (TDR) scheme.

The TDR was established by the TCF in 2007 to protect consumers and build confidence in the industry. Since 2007, the TDR has helped over 18,000 consumers solve disputes.

In order to remain independent, the TDR is operated by FairWay Resolution Limited. It is mandatory for members of the TCF to be a part of the TDR scheme. TDR members are required to promote the free service in their communications with their customers.

In 2017/2018 the TDR received 2,261 complaints and enquiries from consumers. Of those, 97 percent of the enquiries were resolved promptly with service providers working directly with customers, and did not result in formal complaints to the TDR.

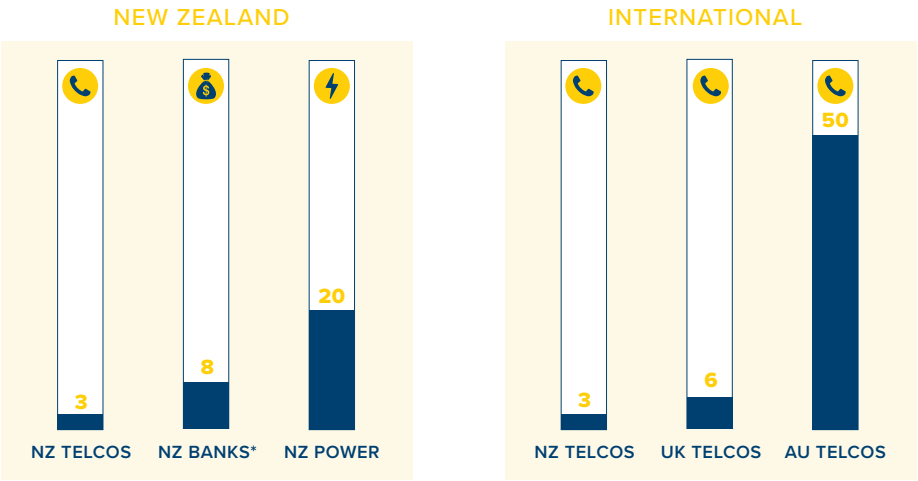
Consumers have a high level of satisfaction with the TDR which is evident by its Net Promoter Score of +78. Billing is the most common complaint (41 percent of complaints) followed by customer services complaints (14 percent.)

Work is currently underway to improve the way in which the TDR's complaint data is reported to ensure that it is providing useful insights for consumers, TDR members and the industry, by breaking down the complaint enquiries into mobile and broadband, and reporting them by the major scheme members per 10,000 connections.

In order to determine how the New Zealand telecommunications industry customer service equates to other industries, the TCF has compared enquiries and complaints received by the TDR, with those received by dispute resolution bodies in other sectors and jurisdictions.

The figure below shows a comparison of the number of complaints and enquiries reported for 10,000 connections received by the TDR against other New Zealand dispute resolution schemes for power and banking, as well as overseas telecommunications dispute bodies in Australia and the United Kingdom.

Dispute Resolutions Scheme: Complaints and Enquiries per 10,000 Connections



**per 10,000 population*

Analysis shows the New Zealand telecommunications industry compares favourably against other New Zealand industries and other international telecommunications dispute services, with a significantly lower number of enquiries and complaints made to the TDR per 10,000 connections.

ABOUT THE TCF

THE TCF AT A GLANCE

The TCF actively fosters co-operation and collaboration amongst the telecommunications industry across regulatory, technical and operational issues in order to get the best outcomes for consumers. It provides a forum in which industry experts can create practical, efficient solutions to technical industry problems and develop self-regulated codes. The compliance of signatories to TCF codes is managed under the TCF Code Compliance Framework.

Key information:

- Presents industry views on a range of important issues;
- 17 members, primarily structured in a tier system based on revenue;
- Membership represents over 95 percent of the telecommunications industry by customer numbers (higher by revenues);
- Comprises: Network Operators, Retailer Service Providers and Mobile Operators;
- The TCF operates on the basis of consensus-based decision making;
- Operates via working groups of experts to develop self-regulatory codes that govern how the industry cooperates for the benefit of consumers; and
- Manages the Local and Mobile Number Portability process which enables a consumer to keep their phone number when changing telecommunications provider.

WORKING PARTY PROJECTS 2019/2020

The TCF works to improve and standardise the processes and practices used across the telecommunications industry. Representatives from telecommunications providers form working parties, administered by the TCF, which advise on industry best practice. A series of formalised codes, standards and schemes are then created for the rest of the industry to follow.

The current TCF Working Party projects are:

- **111 CONTACT CODE:** Providing an industry submission as part of the Commission's 111 Contact Code development process.
- **ABANDONED CONNECTION CODE:** Developing an industry agreed process for customers who have an abandoned connection at a premises for both copper and fibre services.
- **BROADBAND PRODUCT DISCLOSURE CODE:** A review of the Code will take place once the Commerce Commission's Measuring Broadband New Zealand programme has been fully rolled out.
- **CO-SITING CODE:** Undertaking the bi-annual review of the TCF Co-siting code.
- **COPPER MIGRATION CODE:** Establishing an agreed process between RSPs and Chorus when Chorus has a planned migration of copper services to ensure a good customer experience outcome for those affected customer's moving from the Chorus copper network onto another technology.
- **COPPER WITHDRAWAL CODE:** Providing an industry submission as part of Commission's Copper Withdrawal Code development process.
- **CUSTOMER COMPLAINTS CODE:** Reviewing the Customer Complaints Code.
- **E-WASTE:** Building a framework to measure industry e-waste volumes.
- **MOBILE MESSAGING:** Completing a review of the Mobile Messaging Services Code and ensure it is still aligned with industry best practice and the mobile messaging market changes.
- **NZSAR WORKING PARTY:** Working to improve and streamline information provided to search and rescue agencies by telecommunications industry in response to incidents.
- **PRODUCT STEWARDSHIP:** Running a RE:MOBILE education campaign with Ministry of Environment funding to educate customers about the benefits of recycling mobile phones.
- **SCAM CALL BLOCKING:** Coordinating a streamlined approach to stop phone scams to NZ customers.
- **UBA STD OPS MANUAL REVIEW:** Reviewing the UBA STD Operations Manual non-price terms.
- **UFB INSTALLATION CODE:** Establishing a set of industry agreed minimum requirements for the installation of fibre services at a customer's premises.
- **VULNERABLE END USER CODE:** Developing industry best practice for end users who have identified themselves as a vulnerable end user for the purposes of fault management and new service installation.

TCF CODES, STANDARDS, SCHEMES AND CURRENT PROJECTS AT A GLANCE – 2019

Document	Purpose	Supporting Sector		
	CODES	CONSUMERS	GOVERNMENT	INDUSTRY
Broadband Product Disclosure Code	Defines the minimum standards of information for how fixed line, mass market broadband services are described to consumers, to allow consumers to easily compare broadband plans between service providers.	◆		◆
Code Compliance Framework Code	Describes the framework to enable the industry to self-regulate. Promotes compliance with TCF codes and aids consumer confidence in the provision of telecommunications services.	◆		◆
Co-siting Code	Enables a cooperative approach to co-siting radio and mobile communications equipment. Applies where the property owner requires the consent of the original party before granting rights to the co-siting party.			◆
Customer Complaints Code (TDRS)	Enables the prompt, effective and independent resolution of customer complaints and helps to identify systemic issues arising from disputes and determinations.	◆		◆
Customer Transfer Code – Regulated (Copper)	Defines the process for transferring a customer's regulated telecommunications services between Retail Service Providers (RSPs) that is consistent with the purpose and provisions of the Telecommunications Act.	◆		◆
Customer Transfer Code – Non-regulated (Fibre)	Defines the process for transferring a customer's fibre telecommunications services between RSPs, ensuring a seamless process for the customer.	◆		◆
Disconnection Code	Provides disconnection standards to enable RSPs to develop and implement fair and consistent disconnection policies for their residential customers.	◆		◆
Emergency Services Calling Code	Specifies 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.	◆	◆	◆
Fibre Installation Code	Agrees the activities and processes between the RSP, LFC and customer when installing fibre and defines the requirements during the end-to-end customer journey to deliver the agreed customer experience.	◆		◆
IMEI Blacklisting Code	Discourages the theft and fraudulent acquisition of mobile handsets by disconnecting blacklisted handsets from all mobile networks in New Zealand and overseas jurisdictions where available. Applicable to only mobile network operators.	◆		◆
International Mobile Roaming Code	Helps raise awareness for consumers of International Mobile Roaming (IMR) services through consistent communication about tariffs and likely costs for mobile roaming.	◆		
Mobile Messaging Services Code	Encourages the responsible delivery of messaging services that are compliant with legal and regulatory obligations.	◆		
Scam Calling Prevention Code	Defines an agreement between RSPs to share information, enabling the policing of phone scammers to reduce the number of phone scams operating in New Zealand.	◆		◆
Product Stewardship Scheme	Provides an avenue to donate unwanted mobile phones for re-use or recycling in New Zealand.	◆		
Unauthorised Use of Mobile Phones in Prisons Code	Provides a basis upon which the unauthorised use of mobile phones in prisons can be controlled using interference generating transmitters or "jammers".		◆	
Vulnerable End Users Code	Ensures that the telecommunications industry acts in a responsible manner when dealing with customers who have an identified vulnerability, and a dependency on a fixed line telecommunications service at their property.	◆		◆

TCF CODES, STANDARDS, SCHEMES AND CURRENT PROJECTS AT A GLANCE – 2019

Document	Purpose	Supporting Sector		
	INDUSTRY GUIDELINES AND STANDARDS	CONSUMERS	GOVERNMENT	INDUSTRY
Community Engagement for New Wireless Telecommunications Facilities Guidelines	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	Guidelines to enable a best practice collaborative approach by New Zealand telecommunications service providers for the mitigation of International Revenue Share Fraud (IRSF).	◆	◆	◆
Interception Guidelines	Assists Network Operators and RSPs in complying with the Telecommunications Interception Capability Act in an efficient, timely and cost-effective manner.		◆	◆
Interconnection of Voice over Internet Protocol (VoIP) Technical Standards	Provides a baseline Network-to-Network interconnection standard that enables New Zealand Network Operators to interconnect IP networks, primarily for the carriage of Voice over Internet Protocol (VoIP) calls.			◆
Premises Wiring Guidelines for installers and consumers	Guidelines for the sector when installing generic or structured cabling for telecommunicationsservices in residential/business and multi-dwelling unit premises. Includes consumer information on best-practice residential premises wiring.	◆		
Principles for Telecommunications Infrastructure for new Subdivisions	Provides Local Government Authorities with guidelines for minimum standards for developers when telecommunications infrastructure is being installed in new sub-divisions.		◆	
UFB Ethernet Access Standards	Provides a minimum set of requirements for the industry to deliver UFB Layer 2 services across the UFB network, and defines the supporting service level terms key principals.	◆		◆
UFB OSS BSS Business Interaction Framework	Defines minimum requirements to deliver UFB operational and business processes in a consistent manner. These specifications are drafted into the 'UFB Business Interaction Framework' document.			◆

Working Groups	Purpose	Supporting Sector		
	ONGOING FORUMS AND WORKING PARTIES	CONSUMERS	GOVERNMENT	INDUSTRY
Communications Working Party	Assists with developing public understanding of the economic, environmental and social contribution of the New Zealand telecommunications industry. Identifies and implements initiatives to support and educate consumers on industry-wide topics.	◆	◆	◆
Fraud and Revenue Assurance Working Party	Works collaboratively to reduce the significant losses experienced in the telecommunications industry due to fraud and bad debt.			◆
Local and Central Government Infrastructure Standards Working Group	Facilitates collaboration with councils and government on matters relating to the telecommunications sector (planning, infrastructure build, and processes with Local and Central Government New Zealand).	◆	◆	◆
Number Portability: User Group – LMNP Regulatory & Policy Technical	Monitors the Industry Portability Management System (IPMS) and identifies any changes required to the IPMS by the Local and Mobile Number Portability (LMNP) or Network Terms.	◆		◆
Regulatory Committee	Assesses what the telecommunications industry regulatory environment will be in the future (2020) and considers a regulatory strategy to achieve the industry's agreed path.	◆	◆	◆
TDR Council	Oversees the Telecommunication Dispute Resolution scheme, enabling the prompt, effective resolution of customer complaints, and identifies systemic issues arising from disputes and determinations.	◆	◆	◆
UFB Product Forum	Provides a platform for the industry to discuss fibre-related matters, products and services and facilitates stakeholder engagement between RSPs and Network Operators.	◆	◆	◆

OUR MEMBERS

Photo credit: NZStory – Sara Orme

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