



## Chorus: "The Sharp End of Damaging Vital Buried Infrastructure"



**New Zealand's largest  
Telecommunications  
infrastructure company**

**1.72m** fixed line connections

**1.22m** broadband connections

Chorus was formed in March 2008 as a Telecom business unit. In December 2011 Chorus formally became a separate entity and was listed on the New Zealand stock exchange.

It maintains and builds a network predominantly made up of local telephone exchanges, cabinets and copper and fibre cables. Approximately 1.8 million lines are connected to homes and businesses throughout the country. Chorus is also responsible for building approximately 70% of the new fibre optic Ultra-Fast Broadband network.

**NOT** getting "Network Protection" right greatly disrupts the everyday lives of New Zealanders.

It's a Friday, Browns bay, near Auckland, a civil contractor needs to install a new water main to a green-fields subdivision. The weather has put things a little behind schedule.

The work requires a directional drill shot under the berm which will pull through a 100mm PVC water main so that the specialist plastic welding team can start work on Saturday morning.

The drill unfortunately takes out a 1000 pair copper and 48 fibre cable inside a duct.

The contractor did have network plans but didn't take any of the other precautions that are now considered essential to protecting any underground utility.

That is to say, no cable locate and mark-out. Also the contractor didn't pothole to actually eyeball the cable and hence would not have seen the older 1000 pair cable under the fibre duct.

Not only does the damage cause immediate outage to 550 Telephony and Broadband customers but also it disconnects medical alarm monitoring and the ability to make landline 111 calls, some as long as 48 Hours.

The small shopping centre just down the road has lost everything but most importantly for the retailers EFTPOS is gone and who carries cash these days..?

That's OK there's always Mobile service!

Hang on, Sorry, NO! The fibre cable was also hit severing the exchange links from local Cell Sites to the Mobile Switching Centre.

The fibre cut has also disrupted the inter-exchange telecommunications mesh link that connects the Browns Bay exchange to the national network and will likely cause data and voice services congestion for the North Shore!

Additionally, cutting the fibre cable means that the medical centre by the shops has lost remote video linking back to Green Lane hospital for a local disabled patient undergoing a remote Telemedicine session.

These impacts give a clearly illustrate the absolute CRITICALITY of buried fixed line communication networks and their importance to the welfare of New Zealanders. Correspondingly, telecommunication is an essential service as defined by government legislation.

Being vigilant and responsible.

Excavation work near any buried network is risky. You create a safer working environment and avoid potential repair costs by using the beforeUdig cable location service.

We recommend requesting a cable location and ground mark-out.

The mark-out will show you where our network is buried so you know which areas to work cautiously in before you break ground. You can also reduce the chance of damaging our network by using modern pot-holing and hydro-excavation methods.

When your work is close to our high capacity network, a free stand-over service is available once the asset location fee has been paid. We will work with you onsite to further minimise any risk of damage to the Chorus network and our customers' services.

If you need any further advice please contact Chorus on **0800 822 003** or by email on **NPG@chorus.co.nz**

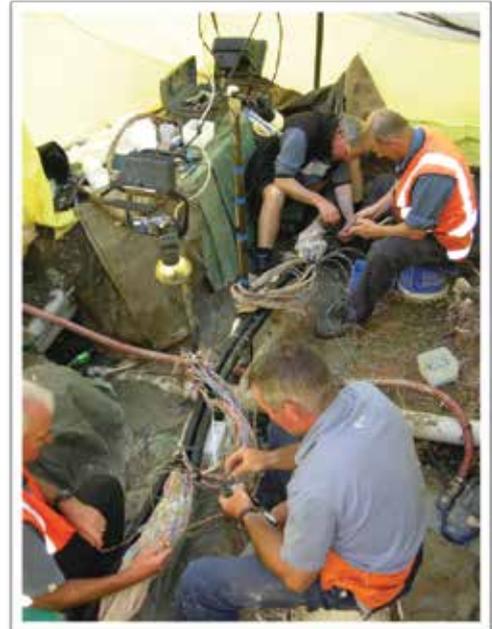
If you have accidentally damaged our cable or you feel that our network is at risk, please call **0800 4 NETWORK (0800 463 896)** and select option 2 for assistance.

**Please don't try any first aid!** It's actually very difficult to tell the difference between a high voltage power cable and a telecommunication cable. Just leave the excavation open and give us a call.

One thing to bear in mind is that repairing telecommunications is a very expensive business. The replacement cables and equipment are costly, the actual repair requires a high level of skill. Remember also that although you may have hit the cable at a certain place, it's often necessary (especially with fibre) to replace a longer length because the conductors may have been stressed over a long distance.

In the modern suburban environment, with the installation of Ultra-Fast Broadband, each individual resident has a separate fibre and this will snap if the Microduct bundle is pulled up by a digger. Each fibre then needs to be individually blown from the distribution point to the customer of that service.

A time consuming and resource wasting exercise for us, an unnecessarily costly exercise for the damager but most of all a huge inconvenience for the customers that expect telecommunications to be "Always On"!



Large copper cable repair job, approximately 40 hours for 6 jointers working a 24 hour shift

### About beforeUdig

beforeUdig is a referral service for information on locating underground utilities anywhere in New Zealand. The service is designed for all members of the public from home owners to excavators, drainlayers, plumbers, planners, developers, landscapers and a host of other professions where workers need to be aware of the location and risk of associated assets. Launched in 2007, beforeUdig are the guardians of asset information for 145 different utilities and asset owners throughout New Zealand. The beforeUdig interactive website allows you to lodge your enquiries online either on your desktop computer or onsite on your smartphone or mobile device. beforeUdig NZ use the most up to date OneCall program available which enables you to view the excavation site onscreen. beforeUdig NZ is owned and operated by PelicanCorp (NZ) Ltd. PelicanCorp are the only global One Call solution dedicated to the protection of essential infrastructure and provide beforeUdig solutions in Australia, United States, UK, Singapore, Ireland and Canada.

[www.beforeudig.co.nz](http://www.beforeudig.co.nz)

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