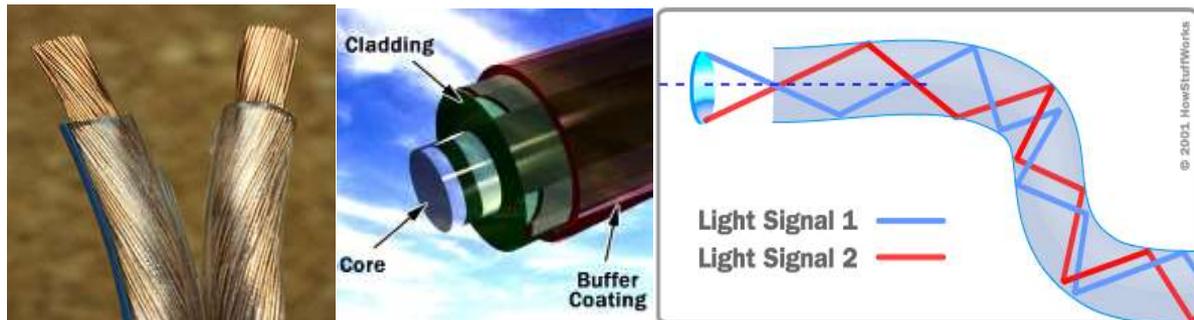


## Fibre optic cables

The Government is spending NZ\$1.35 billion to roll out fibre-to-the-home connections in all main towns and cities with a population over 10,000. The programme aims to deliver ultra-fast broadband to 75% of New Zealanders by 2019. In total, 1,340,000 households in 26 towns and cities will be connected.

### What does this mean for you as the consumer?

The older method of transmitting telephone and internet services was by the use of copper cables. In many parts of New Zealand the copper cables are still the only option available.



Copper

Fibre optic

How the light signal travels in fibre optic cable

### The benefits of fibre optic cable

- The cable is more economical to lay.
- Fibre optic cable consumers will be able to get much higher speeds on their internet connections.
- The fibre optic cable is a much more secure method of interacting in the internet world than the older copper cables.
- Many more connections will be available as the fibre optic cable has a large amount of fibres in their core.
- The fibre optic network will operate by sending light signals. The speed of light is approximately 186,000 miles per second so the information will be sent much faster.
- The quality of the signal sent is also much higher which will allow for accurate medical and mechanical imaging to be sent via the internet.

With more web surfers using the internet to download and upload videos, movies, music and pictures, bandwidth and speed are critical. Fibre optic internet service represents a huge step forward. It allows cable TV to be accessed via the internet and streaming of videos and music are much faster than previously possible.

The cables are laid underground but to install the cables in multi user complexes, such as apartment buildings, townhouses, or commercial premises, the companies laying the cables will need access to various parts of these buildings. The Government has recognised this could be a problem area and has included a dispute resolution clause in the legislation. The Telecommunication Dispute Resolution service is available free to owners and occupiers in multi-unit complexes who have a dispute with these companies about access issues.