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New Zealand



Steps Taken By The New Zealand Government & Industry to Protect Submarine Cables

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15th April 2011

“Introduction”



This presentation has been compiled by New Zealand (NZ) Government (Govt) agencies and representatives of the submarine cable industry in NZ.

This presentation will demonstrate how the NZ Govt and the cable industry continue to work together to ensure the right measures are taken to protect our “critical submarine cable infrastructure”.

The NZ model is one which could be used as a template for other Nations.

“Critical Undersea Infrastructure”



A common misconception is that international communication is carried via satellite links, the reality is that globally, **95%** of trans-oceanic traffic carried over submarine cables.

NZ is a very isolated nation and is extremely reliant upon global submarine cables. Over **96%** of our international communication is carried over submarine cables. Major submarine power cables carry crucial power between the two main islands of NZ.

Submarine cables are critical components of NZ's infrastructure and play a significant role in our everyday lives, the general economy and security of NZ.

"Our Submarine Cable Legislative History"



1966: Submarine Cables & Pipelines Protection Act 1966 enacted to protect power cables.

Late 1980's / early 1990's, major new fisheries developed.

1991 - 1993: A major power cable failure, investigations showed evidence of trawling damage and widespread illegal activity.

The 1966 Act identified as highly inadequate to protect key infrastructure.

"Our Submarine Cable Legislative History"



1993; TransPower initiated (industry driven) project for new legislation, supported by other cable industry partners.

TransPower's patrol contractors asked for 'real world' input on practicality and enforcement at sea – key point.

Submission from industry included draft legislation wording written by TransPower's law firm.

May 1996: Submarine Cables & Pipelines Protection Act 1996 enacted with unanimous support of Parliament.

As a party to the United Nations Convention on Law of the Sea (UNCLOS), **this legislation meets our obligation under UNCLOS Article 113.**

“Submarine Cable & Pipelines Protection Act and Order”



The Submarine Cables and Pipelines Protection Act 1996 and Order 2009 provide that:

It is an offence to damage a submarine cable or pipeline. The penalties are up to NZ\$250,000.

Protected areas can be declared, in which it can be specified what classes of activities or classes of ships, are prohibited. The penalties for unauthorised activity in these areas are up to NZ\$100,000.

Eleven cable protection areas (commonly known as Cable Protection Zones or CPZs) have been established around the country. These CPZs ban all anchoring and most types of fishing to prevent cable damage.

Equipment and vessels used in an offence can also be seized, and forfeited if there is a conviction.

"Government & Industry Work Together"



We have good legislation but the enforcement of it is a real challenge. There are two components in this process:

- Cable patrols, offence information gathering, investigation
- Formal prosecution of offenders

To share the burden of this challenge the Govt and cable industry have agreed to fund and manage specific components.

Cable industry fund & operate the cable patrol activity (sea and air), gathering infringement information & assisting police investigations.

"Cable Patrol Vessels"



"Government & Industry Work Together"



The Govt agency funds & manages the prosecution of offenders.

Govt agency & industry have agreed a prosecution protocol.

Govt agency engages Crown Prosecution Team to take on prosecutions.

Since 1996 there have been **26** successful prosecutions – **good deterrent.**

“Cable Awareness Education ”



Cable awareness education for maritime communities is imperative, our **“catch fish not cables”** phrase is central to this campaign.

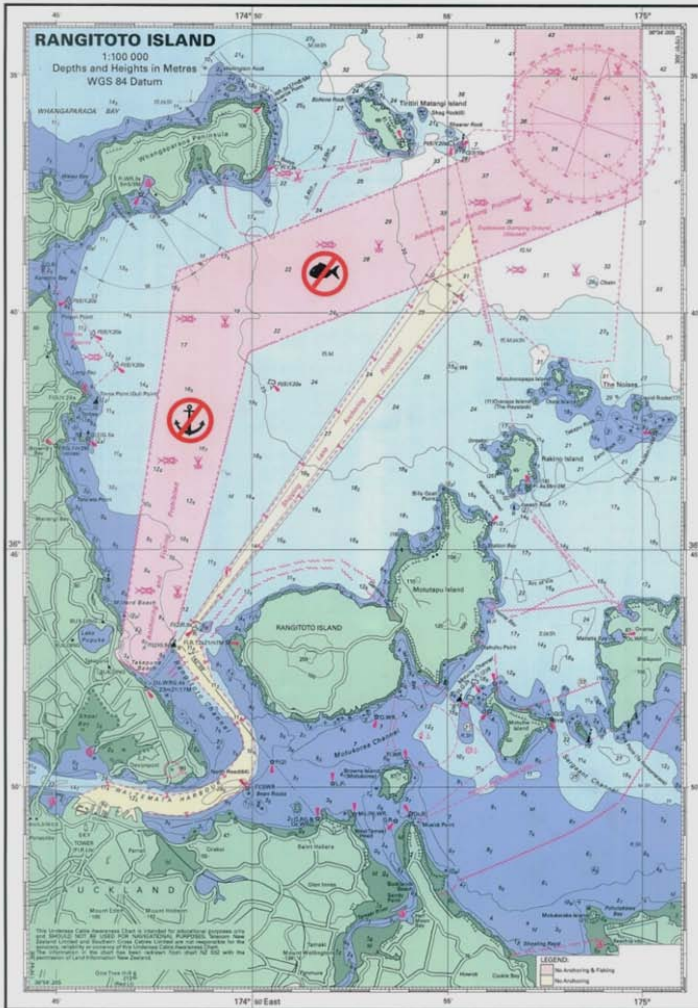
Do not assume that the maritime community or other seabed users have any awareness of the presence or criticality of submarine cables.

Ministry of Transport has also run cable awareness advertisements in key maritime publications.

The UNEP & ICPC have produced an extremely good publication: *“Submarine cables and the oceans: connecting the world”*

Link: http://www.unep-wcmc.org/pdfs/ICPC-UNEP_Cables.pdf

"Cable Awareness Charts"



"Catch Fish Not Cables"

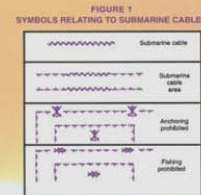
NOT TO BE USED FOR NAVIGATION

"catch fish... not cables"

Telecom New Zealand Limited has operational and maintenance responsibilities for a number of International Submarine Cables which come ashore in the Auckland area. These cables supply international telecommunications for both New Zealand and Australia to the rest of the world. The protection of these cables is paramount to their many owners, of which Telecom is one. Simply catching a cable with a fish hook can damage the protective outer layer. Actually hooking a cable with an anchor or fishing gear can damage the fragile fibres to such an extent that costly repairs are required. These cables are laid in three submarine cable corridors in the greater Auckland area where anchoring or fishing is prohibited under the Submarine Cable & Pipeline Protection Act.

- **Muriwai Beach** out to the 12 mile territorial limit where both anchoring and fishing is prohibited.
- **Scott Point to Island Bay** in the upper Waitemata Harbour where anchoring is prohibited.
- **Takapuna Beach** which runs from Takapuna Beach in the south to just north of the Hen & Chicken Islands (opposite Taharuru Head) where anchoring and fishing is prohibited.

Note: These protected areas are monitored by sea and air patrols.



THESE ARE SOME OF THE PENALTIES

- A maximum fine of **\$20,000** for a non-commercial vessel.
 - A maximum fine of **\$100,000** for a commercial vessel.
 - A maximum fine of **\$250,000** for damaging a submarine cable.
- Additional to the fine for damage, the cable owners would inevitably pursue the recover of costs associated with repairs, this could be up to **\$750,000** plus a day; a typical repair can take up to two weeks (around \$10 million).

BE AWARE

These international submarine cables carry up to **10,000 volts** to power the system repeaters along the cable.

WHAT SHOULD YOU DO?

- If you are going into any of these areas, be sure to check your marine charts and/or GPS plotter so you know the exact locations of the prohibited zones. The relevant charts are NZ53, NZ5322, NZ532, NZ522, NZ52, NZ42 and NZ43. The symbols used to mark the zones are detailed in Figure 1.
- If you suspect you have snagged your anchor or fishing gear on a submarine cable in one of these areas, **don't try to free it**. Note your position, abandon your gear, then contact Telecom.

WHAT HAPPENS OUTSIDE THE PROHIBITED AREAS?

These cables are covered by the Submarine Cables and Pipelines Protection Act regardless of whether they are inside or outside a prohibited area. Beyond the confines of the 'anchoring and fishing prohibited' areas, the cables are clearly marked on the appropriate marine charts. Considering possible positioning inaccuracies and repaired cable section deviations, fishermen are advised to keep a minimum distance of one nautical mile from either side of charted cables.

NOTE THIS NUMBER

For any queries regarding submarine cables, call:

ORON SUBMARINE
OR
0800 782 627

The Police Maritime Unit strongly recommends to vessel skippers the following:
• Be aware of and understand your responsibilities and legal requirements.
• You must not place undersea cables at any unnecessary risk of damage through the operation of your vessel.

This Undersea Cable Awareness Chart is Supported by the Police Maritime Unit and ARC Harbour Master.

HARBOUR MASTER
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CABLE NETWORK

“Where to from here”



While effective, 15 years operational experience with the current Act has shown some further improvements needed. Submissions made requesting:

- Further penalty increases;
- Improved evidence gathering provisions;
- Infringement notice regime;
- Expand to cover other risk activities, not just fishing and anchoring;
- Improved equipment seizure provisions.

The industry has submitted the proposed changes and are awaiting Govt review. At this stage the changes are not in any legislative review calendar.

"Submarine Cables Act & Order"



Link to NZ's Submarine Cables & Pipelines Protection Act 1996:

http://www.legislation.govt.nz/act/public/1996/0022/latest/whole.html?search=ts_act_Submarine+Cables+and+Pipelines+Protection+Act+1996_rese&p=1#d1m375803.

Link to NZ's Submarine Cables & Pipelines Protection Order 2009:

http://www.legislation.govt.nz/regulation/public/2009/0041/latest/whole.html?search=ts_all%40act%40bill%40regulation_Submarine+Cables+and+Pipelines+Protection+Order+2009_rese&p=1#d1m1847710

"Summary"



Govt & industry can & must work together to get the right protection for "critical submarine cable infrastructure".

Good legislation is only as good as its enforceability.

Essential to establish cable awareness campaign to educate the maritime communities & other seabed users.

Establish strong relationships with key seabed users, at both local & national levels.

THANK YOU