Submarine Cables and Pipelines

Background

Submarine communications cables are underwater telecommunications infrastructure linking Australia with other countries. They carry over 99 per cent of our international voice and data traffic and are a vital component to our national infrastructure. The cables are vulnerable to damage and breakage, which can have serious consequences for the flow of communications traffic to and from Australia.

Submarine cables are depicted on Australian Navigational Charts. Mariners are warned to avoid anchoring or trawling within one nautical mile of the vicinity of submarine cables. In general, the accuracy with which cables are laid and charted varies with the distance from land, and the navigation methods available when the cable was installed. Cables laid before satellite navigation became commonplace could be displaced up to 1nm from the charted position. Cables laid more recently are usually positioned considerably better; however cables may have been moved from their original position due to cable repair operations. The most recent updated charts should always be consulted.

The cables do not always lie flat and straight on the seabed. Seabed irregularities may result in cable suspensions occurring. During repair work, when a new section is spliced in, it is necessary for the repair ship to install a length of cable approximately twice the depth of the water. This excess cable may form loops and protrude from the seabed. Cable burial can only take place where the seabed is geologically suitable and tide and current conditions are favourable.

In the event of fouling a submarine cable every effort should be made to clear the anchor or gear by normal methods. Should these fail, the anchor or gear should be slipped and abandoned without attempting to cut the cable. High voltages are often fed into cables and pose a serious risk if an attempt is made to cut them.

Submarine Cables Protection Zones

Under Schedule 3A of the Telecommunications Act 1997, the Australian Communications Media Authority has declared three submarine cable protection zones; Northern Sydney, Southern Sydney and Perth. These zones protect submarine telecommunication cables that are of national significance to Australia.

Northern Sydney:
This zone extends from Narrabeen Beach to 40 nautical miles off shore and protects the Northern branches of the Australia Japan Cable and the Southern Cross Cable, including the area between these two cables.

Southern Sydney:
This zone extends from Tamarama and Covelly Beaches to 30 nautical miles off shore and protects the Southern Branches of the Australia Japan Cable and the Southern Cross Cable including the area between these cables.

Perth:
This cable extends from City Beach and extends approximately 51 nautical miles offshore. It covers the SEA-ME-WE3 cable and extends up to one nautical mile either side of the cable.

Within these protection zones activities such as operating trawl gear designed to work on or near the seabed, or a mid water trawl, dredging, are prohibited whilst activities such as anchoring and the use of pots and traps that could damage submarine cables are restricted. Details of the activities restricted or prohibited by the protection zones can be found in each of the declaration documents Submarine Cable (Northern Sydney Protection Zone) Declaration 2007, Submarine Cable (Southern Sydney Protection Zone) Declaration 2007 or Submarine Cable (Perth Protection Zone) Declaration 2007 which can be found on the ACMA website.

It is an offence to damage a submarine cable within a protection zone and significant criminal and civil penalties apply. Further information about the location and restrictions for each of the protection zones can be found on the ACMA website (www.acma.gov.au/subcables). Navigational charts have been updated to reflect the declaration of the zones and details are available via Google Earth.

Cables in other Locations

The Australian Communications Media Authority also issues permits for the installation of submarine cables outside protection zones (non protection zone permits) under Schedule 3A of the Telecommunications Act 1997. These cables are marked on most maritime maps and are also covered by the Submarine Cables and Pipelines Protection Act (1963), which gives effect to Australia’s obligations under the UN Convention on
the Law of the Sea with respect to submarine cables (including petroleum and gas pipelines, electricity cables and telecommunications cables). The Act applies to Australian ships in the Australian EEZ. The Act entitles mariners to claim compensation from cable companies if they have sacrificed an anchor, net or other fishing gear in order to avoid damaging a submarine cable and outlines a range of offences for the breaking or injuring a cable. Details of an incident must be entered into the vessel's Log.

**Reporting and Compensation**

To report an incident with a submarine cable or to claim compensation for a lost gear the vessel involved must lodge a report in writing within 24 hours of arrival at the next port of call. The report must include:

- Vessel's name, registration number, Master's name and contact details;
- Name and address of the vessel's owner;
- The vessel's position at the time of the incident (indicate land bearings and readings off navigation systems used);
- Water depth;
- Charts in use;
- A description of cable if sighted;
- A copy of the relevant page from the vessel's log
- Action taken to free gear and / or avoid damage to the cable.

This information will be used to process claims and to identify if there is any error in the charted position of the cable.

Incidents involving submarine cables should be reported to the Australian Federal Police Canberra Operations Centre on (02) 6218 8888.

Claims for compensation should be sent to the owner of the submarine cable involved. Contact details for cable owners can be found on the ACMA website: www.acma.gov.au/subcables

**Accident and Incident Reporting Application**

Australian law requires vessels registered in Australia and foreign flagged vessels in Australian waters or on a voyage to or from an Australian port to report a range of accidents and incidents. Specific requirements are listed below. Any Master who may be in doubt as to the necessity to report an incident is advised to contact the Rescue Co-ordination Centre Australia (RCC Australia).

**Accidents and Incidents**

Section 268 of the Australian Navigation Act (the Act) requires the following incidents to be reported:

- An accident occasioning loss of life or serious injury to a person;
- Damage or defect in the ship, machinery or equipment which may affect the seaworthiness or safety of the ship, efficient operation or safety of the machinery or fixed equipment of the ship;
- The ship has been in a position of peril from the action of another ship or from danger of wreck or collision;
- The ship has been stranded or wrecked, has fouled or damaged a pipeline or submarine cable, lighthouse, lightship, beacon, buoy or other marine mark; and
- Where a ship having left port in Australia had put back to that port or another port in Australia.

Section 269 of the Act requires the owner or agent of a vessel to give notice in writing if it is believed that the vessel has been wholly lost.