Chapter 1

Introduction

1.1 On 5 December 2013, the Senate, through an amendment to the Senate Selection of Bills Committee report, referred the provisions of the Telecommunications Legislation Amendment (Submarine Cable Protection) Bill 2013 (the bill) to the Senate Environment and Communications Legislation Committee (the committee) for inquiry and report by 31 March 2014.1

1.2 The Senate Selection of Bills Committee identified that the principal issues for consideration were that:

The vulnerability of Australia's telecommunications cables carrying international and domestic traffic to interception has been the subject of recent reporting.

It is unclear whether the oversight mechanisms proposed are sufficient and whether the streamlining of permits processes outlined improve the security of this telecommunications infrastructure.2

Conduct of the inquiry

1.3 In accordance with usual practice, the committee advertised the inquiry on its website and wrote to relevant organisations inviting submissions by 15 February 2014. The committee received four submissions relating to the bill and these are listed at Appendix 1. The submissions may be accessed through the committee's website at:


1.4 The committee agreed not to hold a public hearing for this inquiry. However, it requested the Department of Communications to respond to written questions on notice in relation to issues raised in submissions. The answers received from the Department of Communications and the Attorney-General's Department are available on the committee's website.

Purpose of the bill

1.5 Schedule 3A of the Telecommunications Act 1997 (the Act) regulates the protection of submarine telecommunication cables that connect Australia to other countries. The Schedule allows the Australian Communications and Media Authority (ACMA) to declare protection zones in relation to submarine cables. In a protection zone certain activities are prohibited and restrictions may be imposed on other activities. A carrier who intends to install a submarine cable in Australian waters must apply for a permit to do so from the ACMA.

1 Journals of the Senate, No. 7, 5 December 2013, pp 244–246.

2 Senate Selection of Bills Committee, Report No. 10 of 2013, Appendix 4, 4 December 2013.
1.6 The ACMA undertook a review of Schedule 3A, reporting in 2010 and making six recommendations. Five of those recommendations provide the basis of the bill.

**Background**

1.7 Australia's submarine cables carry the bulk of our international voice and data traffic, linking Australia with other countries. Due to their size and location on the seabed, these cables are vulnerable to damage from activities such as the anchoring of ships, some types of fishing, dumping of materials, dredging and mineral exploration. Cable damage can cause data loss, significant delays, and severe financial loss for businesses, cable owners and individuals who rely on linking to global communication networks. Recent media reports have also highlighted the vulnerability of submarine cables to interception by foreign intelligence agencies.

**Submarine cable legislation**

1.8 In 2005, in recognition of the increasing importance of submarine cables, the Commonwealth Government introduced legislation (Telecommunications and Other Legislation Amendment (Protection of Submarine Cables and Other Measures) Act 2005) designed to protect the most critical of these cables. The legislation made minor amendments to the Submarine Cables and Pipelines Protection Act 1963 and inserted Schedule 3A to the Telecommunications Act 1997 which established a regulatory regime under which submarine cables are installed and protected in Australian waters.

1.9 Schedule 3A allows the ACMA to declare protection zones in Australian waters over submarine cables of national significance. Within protection zones, activities that could damage submarine cables are prohibited or restricted. This includes:

- the use of trawl gear that is designed to work on or near the seabed;
- a net anchored to the seabed and kept upright by floats;

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5 Philip Dorling, 'Spy agency taps undersea cables', *Sydney Morning Herald*, 29 August 2013, p. 7.

6 The Submarine Cables and Pipelines Protection Act 1963 applies only to submarine cables beneath the high seas and are not in a protection zone. The Telecommunications Act ’997 regulates telecommunications carriers.

• lowering or raising an anchor from a ship;
• sand mining;
• exploring for or exploiting resources;
• mining and the use of mining techniques; and
• any activity that involves a serious risk that an object will connect with the seabed.\(^8\)

1.10 A protection zone may also be subject to any conditions that the ACMA considers appropriate.\(^9\)

1.11 Within protection zones it is an offence to engage in prohibited activities, damage a submarine cable or to contravene a restriction. Penalties include fines of up to $66 000 and/or ten years imprisonment for an individual, or up to $330 000 for a corporation.\(^10\)

Declaring protection zones

1.12 The declaration of a protection zone may be made on the ACMA’s own initiative or at the request of a person.\(^11\) In declaring a protection zone, the ACMA must first make a preliminary decision whether to proceed with the development of a protection zone proposal after considering technical, economic and geographical information.\(^12\)

1.13 The ACMA must also consider whether the cable is of national significance.\(^13\) Three criteria are used for assessing a cable as having national significance:
• whether the cable is a high capacity cable; and/or
• whether the cable links Australia to another country with an extensive telecommunications infrastructure to carry data and voice traffic to other global destinations; and/or

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whether the cable is important to national security/defence and/or the importance of the cable to the national economy.¹⁴

1.14 If the ACMA decides to proceed with the development of a protection zone proposal, it must then develop a protection zone proposal. The proposal must include the nominal location of the submarine cable, the area of the proposed protection zone and details of the activities to be prohibited.¹⁵

1.15 The proposal must be published in the Gazette and on the ACMA website along with any supporting material such as a discussion paper and maps. Notices must also be published in newspapers circulating generally in each state and territory. Public consultation on the proposal is also to be undertaken by the ACMA.¹⁶

1.16 The ACMA must establish an advisory committee, including representatives of key relevant stakeholder groups, to make recommendations to the ACMA on the proposal.¹⁷ The ACMA must also seek advice from appropriate indigenous and native title bodies on the proposal.¹⁸

1.17 The ACMA is required to consult with the Secretary of the Department of the Environment about a protection zone proposal.¹⁹ The ACMA will seek advice from the Secretary regarding any adverse impacts on specified environmental matters outlined in clause 21 of Schedule 3A. This includes whether the installation, maintenance or operation of the submarine cable:

• is inconsistent with Australia's obligations under listed international agreements;
• could have an adverse effect on a listed threatened species, threatened ecological community, cetaceans or listed migratory species;
• could have an adverse effect on the environment;
• could have an adverse effect on the ecological character of a declared Ramsar wetland; or
• could have an adverse effect on the values of a World Heritage property or a place on the National Heritage List.²⁰

1.18 A similar process to that outlined above must be followed in the varying or revoking of a declaration of a protection zone.²¹

¹⁴ ACMA, Requesting a protection zone be declared, varied or revoked: Information guide, October 2010, p. 2.
1.19 Schedule 3A of the Act obliges the ACMA to decide whether to declare a protection zone within 12 months after the day on which the proposal was published.\textsuperscript{22} Decisions to vary or revoke a protection zone must be made within 180 days after the day on which the proposal was published.\textsuperscript{23}

**Installation permits**

1.20 In addition to the power to declare a protection zone over submarine cables of national significance, the ACMA is given the power under Schedule 3A to issue permits for the installation of all submarine cables.\textsuperscript{24}

1.21 A carrier may apply to the ACMA for a permit to install one or more submarine cables. The carrier must ensure that all reasonable steps are taken to ensure that the installation causes as little detriment and inconvenience, and as little damage, as practicable.\textsuperscript{25} In addition, the carrier must ensure that all reasonable steps are taken to act in accordance with good engineering practice, to protect the safety of persons and property and to protect the environment.\textsuperscript{26}

**Protection zones around submarine cables of national significance**

1.22 The ACMA has declared three submarine cable protection zones over submarine cables of national significance. Two protection zones are located off the Sydney coast and a third is located off the Perth coast.

1.23 In July 2007, the ACMA declared two submarine protection zones off the Sydney coast:

- the Northern Sydney Protection Zone\textsuperscript{27}, which extends from Narrabeen Beach to 40 nautical miles offshore; and
- the Southern Sydney Protection Zone\textsuperscript{28} which extends from Tamarama and Clovelly Beach to 30 nautical miles offshore (see Figure 1.1 below).

1.24 Each zone runs to a depth of 2000 metres.

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\textsuperscript{22} Telecommunications Act 1997, Schedule 3A, clause 22.

\textsuperscript{23} Telecommunications Act 1997, Schedule 3A, clause 35.

\textsuperscript{24} Telecommunications Act 1997, Schedule 3A, clause 50.

\textsuperscript{25} Telecommunications Act 1997, Schedule 3A, clause 79.

\textsuperscript{26} Telecommunications Act 1997, Schedule 3A, clause 80.


Both protection zones came into effect on 1 October 2007 and were developed around two cables that are regarded as nationally significant: the Southern Cross cable (linking Australia with New Zealand, Fiji and the United States); and the Australia-Japan cable (linking Australia with Guam, Japan and Asia). Since the declaration of the zones, three more cables have been installed in the Sydney area: the Gondwana-1 cable (linking Australia with New Caledonia); the PPC-1 cable (linking Australia with Guam); and the Endeavour cable (linking Australia with Hawaii).

There are two Defence practice areas that overlap with the Northern Sydney Protection Zone. The ACMA and the Department of Defence signed a Memorandum of Understanding on 22 December 2008 to address concerns about possible damage to submarine cables in areas where submarine cable protection zones overlap with Defence practice areas.

In September 2007, the ACMA made a declaration for a submarine cable protection zone off the coast of Perth, which has been in effect since

1 February 2008. The Perth Submarine Cable Protection Zone is around the SEA-ME-WE3 cable which links Australia to South East Asia, the Middle East and Western Europe. The Perth Protection Zone extends from City Beach to 51 nautical miles offshore and covers an area of up to one nautical mile on either side of the nominal location of the SEA-ME-WE3 cable (see Figure 1.2).

Figure 1.2: Perth Submarine Cable Protection Zone

Review of Schedule 3A

1.28 Subclause 89(1) of Schedule 3A requires the ACMA to review the operation of Schedule 3A and report to the Communications Minister five years after the legislation commenced (that is, by 20 September 2010). The ACMA commenced the statutory review on 22 December 2009 and presented its report to the Communications Minister on 13 September 2010.

1.29 The review found that 'stakeholders are satisfied that the legislative objectives for Schedule 3A have been met' and that 'the administrative processes employed by


the ACMA are effective and generally satisfy stakeholders’.\textsuperscript{32} The review made six recommendations in response to issues raised during the review process (see Appendix 2 for a full list of recommendations).\textsuperscript{33}

**Recommendation 1**

1.30 Recommendation 1 relates to compliance monitoring in protection zones.

**Recommendation 2**

1.31 Under subclauses 17(2) and 32(2) of Schedule 3A, a proposal to declare, vary or revoke a protection zone must be published by the ACMA in full in the *Gazette*, on the ACMA website and in newspapers in circulation in the affected states and any affected external territories. Schedule 3A requires protection zone proposals to contain a large amount of information which make the newspaper advertisements, often a full broadsheet newspaper page, large and expensive to publish.\textsuperscript{34}

1.32 To reduce costs, the ACMA recommended that clauses 17 and 32 of Schedule 3A be amended so that the ACMA is only required to publish a summary of a proposal to declare, vary or revoke a protection zone.\textsuperscript{35} The ACMA will ensure that all advertisements contain a website detailing where to access a full copy of any proposal.

1.33 The recommendation was supported by a majority of the stakeholders who submitted to the review process.\textsuperscript{36}

**Recommendation 3**

1.34 During cable installation in a protection zone, submarine cable operators may need to make minor route adjustments due to undersea topography. The ACMA has provided flexibility for this by applying the same condition to all previous protection zone installation permits: that cables must be installed within 75 metres of the route stated in the permit.\textsuperscript{37} Additionally, permits stipulate that if a carrier has ‘cogent’ reasons, the cable route may be varied greater than 75 metres.\textsuperscript{38}


\textsuperscript{34} ACMA, *Report on the operation of the submarine cable protection regime*, September 2010, p. 17.


1.35 According to the ACMA, to date, this condition has provided sufficient flexibility in all but one instance, where a variation of 200 metres was required. In that instance the carrier presented cogent reasons for relocating the cable.\textsuperscript{39}

1.36 The ACMA recommended that these standard conditions be introduced to Schedule 3A by amending clause 56 so that the ACMA has the power to set standard conditions that would apply to protection zone permits as well as the power to set conditions on a case by case basis for individual permits.\textsuperscript{40}

1.37 The recommendation was supported by six out of ten stakeholders in the review process. Four stakeholders believed that the change to the legislation would limit flexibility.\textsuperscript{41}

\textit{Recommendation 4}

1.38 During cable installation outside of a protection zone, carriers may need to make small route adjustments because of undersea topography. The ACMA has provided flexibility by applying the same condition to all non-protection zone installation permits that cables must be installed within half a nautical mile of the route stated in the permit. The ACMA stated that, to date, this condition has provided sufficient flexibility when installing cables. According to the ACMA, including this condition in the legislation would be 'administratively more efficient and effective'.\textsuperscript{42}

1.39 The ACMA recommended that clause 69 of Schedule 3A be amended so that the ACMA has the power to set standard conditions that would apply to non-protection zone permits as well as the power to set conditions on a case by case basis for individual permits.\textsuperscript{43}

\textit{Recommendation 5}

1.40 Through the review process, two stakeholders suggested that elements of Schedule 3A may be inconsistent with Article 79 of the \textit{United Nations Convention of the Law of the Sea} (UNCLOS) in that Schedule 3A asserts jurisdiction over foreign vessels and citizens involved in submarine cable related activities in Australian waters outside of Australia's territorial seas.\textsuperscript{44}

\textsuperscript{40} ACMA, \textit{Report on the operation of the submarine cable protection regime}, September 2010, p. 18.
\textsuperscript{41} ACMA, \textit{Report on the operation of the submarine cable protection regime}, September 2010, p. 18.
\textsuperscript{44} ACMA, \textit{Report on the operation of the submarine cable protection regime}, September 2010, p. 22.
1.41 UNCLOS is an international agreement to which Australia is a signatory.\(^{45}\) It defines the rights and responsibilities of nations in their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of natural resources. Article 79 of UNCLOS relates to submarine cables and pipelines on the continental shelf.

1.42 The ACMA stated that:

...there may be an inconsistency between Schedule 3A and UNCLOS but, in practice, the Protection Zone Declarations, made by the ACMA to date, include the clause '...applies to the extent that it is consistent with Australia's jurisdiction under international law', which has the effect of qualifying the application of the Schedule 3A legislation.\(^{46}\)

1.43 The ACMA commented that it understood that 'the government is already aware of the potential inconsistency between Schedule 3A and UNCLOS' and recommended that the Minister take note of the concerns raised and recognise the need to remove the potential for any inconsistency.\(^{47}\)

**Recommendation 6**

1.44 Through the review process, stakeholders suggested extending the protection afforded by Schedule 3A to domestic submarine cables.\(^{48}\) Currently Schedule 3A precludes this consideration because the submarine cable must connect a place in Australia with a place outside of Australia.\(^{49}\)

1.45 Noting the support from stakeholders, the ACMA recommended that the Minister take steps to amend Schedule 3A to provide for protection zones around other submarine cables with national significance that are wholly in Australian waters.\(^{50}\)

**Overview of the bill**

1.46 Recommendations 2 to 6 provide the basis for the Telecommunications Legislation Amendment (Submarine Cable Protection) Bill 2013. The Government


considered recommendation 1 separately and decided to rely on existing practices to ensure protection zones are monitored.51

1.47 The bill makes a number of amendments to Schedule 3A of the *Telecommunications Act 1997*. The main themes of the bill are:

- clarifying consistency between Schedule 3A and UNCLOS;
- enabling domestic submarine cables to be brought within the scope of the regime;
- clarifying the consultation process between the ACMA and the Attorney-General's Department on submarine cable installation permit applications; and
- amendments to enhance the operation of Schedule 3A.

**Clarifying consistency between Schedule 3A and UNCLOS**

1.48 To remove any inconsistency between Schedule 3A and UNCLOS, the bill proposes to modify the application of Schedule 3A to foreign nationals and foreign ships. The Explanatory Memorandum states that 'under the proposed amendment, it would not be an offence for foreign nationals and ships to engage in an activity otherwise prohibited beyond Australia's territorial sea, unless such regulation is consistent with Australia's rights and obligations under UNCLOS'.52

1.49 The bill would also require the Communications Minister or a government agency to obtain the Attorney-General's consent before it can institute any proposed criminal or civil proceedings against a carrier that is a foreign national for breach of a permit condition where the breach occurs beyond the territorial sea.53 These amendments would give effect to recommendation 5 of the ACMA review report.

**Domestic submarine cables**

1.50 To ensure that significant domestic submarine cables (those cables that connect one place in Australia to another place in Australia) can be suitably protected, the bill would amend Schedule 3A to give the Governor-General the power to specify in regulations that a domestic submarine cable or cable route warrants protection.54

1.51 The bill would also give the ACMA the power to declare a protection zone in relation to a domestic submarine cable or cable route that is specified in the regulations.55 In addition, carriers will be allowed to apply for a protection zone

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52 Telecommunications Legislation Amendment (Submarine Cable Protection) Bill 2013, *Explanatory Memorandum*, p. 5.


54 Telecommunications Legislation Amendment (Submarine Cable Protection) Bill 2013, item 20.

55 Telecommunications Legislation Amendment (Submarine Cable Protection) Bill 2013, items 20 and 29.
permit to land a domestic submarine cable in an existing protection zone so as to
allow for the installation of domestic cables in protection zones.\textsuperscript{56} This amendment
would give effect to recommendation 6 of the ACMA review report.

\textit{Consultation between the ACMA and the Attorney-General's Department}

1.52 The bill would create a structured process for the consideration of the
Attorney-General's Department's portfolio matters in relation to proposed submarine
cables, such as international law, native title or security matters. The ACMA would be
required to consult the Secretary of the Attorney-General's Department on permit
applications.\textsuperscript{57} Following such consultation, the Secretary of the Attorney-General's
Department can indicate there is no objection to the application, make a submission,
or extend the consultation period by giving notice to the ACMA.\textsuperscript{58}

1.53 The bill would also give the Attorney-General the power, after consultation
with the Prime Minister and the Communications Minister, to direct the ACMA not to
issue a permit if doing so would be prejudicial to security.\textsuperscript{59}

1.54 The bill includes consequential amendments including to provide appropriate
review rights.\textsuperscript{60}

\textit{Enhancements to the operation of Schedule 3A}

1.55 The bill proposes additional amendments to help streamline the operation and
administration of Schedule 3A including:

- removal of the requirement for carriers to obtain two permits for an
  international submarine cable that will pass through a protection zone and a
  non-protection zone;

- reduction of the processing timeframes for permit applications from 180 days
to 60 business days;

- removal of the requirement for the ACMA to consult with the Secretary of the
  Department of the Environment in relation to non-protection zone installation
  permit applications;

- clarification that to land a submarine cable a carrier must obtain all necessary
  Commonwealth regulatory approvals;

\textsuperscript{56} Telecommunications Legislation Amendment (Submarine Cable Protection) Bill 2013, items 47
and 77.

\textsuperscript{57} Telecommunications Legislation Amendment (Submarine Cable Protection) Bill 2013, item 51.

\textsuperscript{58} Telecommunications Legislation Amendment (Submarine Cable Protection) Bill 2013,
items 54, 63 and 65.

\textsuperscript{59} Telecommunications Legislation Amendment (Submarine Cable Protection) Bill 2013, items 54
and 68.

\textsuperscript{60} Telecommunications Legislation Amendment (Submarine Cable Protection) Bill 2013, items 1,
2, 3, 85, 86, 87 and 88.
setting of allowable deviations from a specified cable route in protection zones and non-protection zones as conditions for all cable installations. This amendment would give effect to recommendations 3 and 4 of the ACMA review report;

allowing the ACMA to publish a summary of a proposal to declare, vary or revoke a protection zone in newspapers and the *Gazette*, but require a full proposal to be published on its website. This amendment would give effect to recommendation 2 of the ACMA review report.\(^61\)

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\(^61\) Telecommunications Legislation Amendment (Submarine Cable Protection) Bill 2013, items 27, 31, 54, 55, 68 and 69.