

# Report on the operation of the submarine cable protection regime

A report on five years' operation of Schedule 3A of the *Telecommunications Act 1997*, the submarine cable protection regime

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Chairman

13 September 2010

Senator the Hon. Stephen Conroy  
Minister for Broadband, Communications and the Digital Economy  
Parliament House  
Canberra ACT 2600

Dear Minister

**A report on five years' operation of Schedule 3A of the *Telecommunications Act 1997*, the submarine cable protection regime**

I attach a report titled *A report on five years' operation of Schedule 3A to the Telecommunications Act 1997, the submarine cable protection regime* (the report) for your consideration. The report is provided to you in accordance with clause 89(1) of Schedule 3A.

The review of Schedule 3A formally commenced on 22 December 2009, with the release of the *Submarine cable regulation discussion paper* (the paper). The paper was publicly released on the ACMA website, as well as provided directly to a wide range of stakeholders. The ACMA invited feedback in response to the paper and 18 written submissions were received.

The ACMA concluded that the operation of Schedule 3A since 2005 has met the policy objectives set by the government. Schedule 3A is also very well regarded internationally and has been described in such terms as 'ideal regulation' and 'best model legislation'. Nonetheless, the review has identified several improvements that could be made to the operation of Schedule 3A. The report makes six recommendations for improvements to the regime, including some proposed amendments to Schedule 3A.

The report also sets out the funding arrangements that supported the establishment of the three protection zones, which was a resource-intensive activity for the ACMA.

Please note that clause 89(2) of Schedule 3A requires that you table the report in each House of the Parliament within 15 sitting days of that House sitting after you have received it.

I commend the report to you and look forward to further improvement of what is already regarded by many informed players as a 'world's best regulatory regime'.

Yours sincerely

Chris Chapman  
Chairman

communicating | facilitating | regulating

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# Executive summary

Submarine telecommunications cables link Australia to global communications networks and are vital to the national economy. In 2005, Schedule 3A of the *Telecommunications Act 1997* (Schedule 3A) established a regulatory regime under which submarine cables are installed and protected in Australian waters. In accordance with clause 89(1) of Schedule 3A, the Australian Communications and Media Authority (ACMA) has undertaken a review of the operation of Schedule 3A. This report by the ACMA presents the findings from the review and recommends changes to improve the operation of the regulatory regime.

The review of Schedule 3A formally commenced on 22 December 2009, with the release of the *Submarine cable regulation discussion paper* (the paper).<sup>1</sup> The paper set out the legislative objectives for Schedule 3A, the ACMA's operational experience and associated administrative processes as well as some minor administrative issues and potential solutions identified by the ACMA. The paper was publicly released on the ACMA website and was provided directly to a wide range of stakeholders. The ACMA invited feedback in response to the paper and 18 written submissions were received.

The ACMA's view is that, over the past five years, the operation of Schedule 3A has soundly met the policy objectives set by government and the supporting operational processes have been efficient and effective. The submissions the ACMA received supported this general view noting, however, that there is room for improvement. The ACMA proposes some amendments of an administrative nature to the legislation, further study of proactive cable monitoring in protection zones and extending Schedule 3A to other submarine cables of national significance laid wholly in Australian waters. This report makes six recommendations that, if implemented, would improve the operation of the regime. The recommendations are discussed in detail in this report.

The ACMA has provided this report on the operation of Schedule 3A to the Minister for Broadband, Communications and the Digital Economy (the Minister) in accordance with clause 89(1) of Schedule 3A. Clause 89(2) requires that the Minister table the report in each House of the Parliament within 15 sitting days of that House receiving the report.

The ACMA has six recommendations:

1. The Minister consult with the Attorney-General about the conduct and funding for a study to determine whether active compliance monitoring in protection zones is necessary and if needed, how this monitoring could be provided.
2. 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.
3. Clause 56 of Schedule 3A be amended so the ACMA has the power to set standard conditions that would apply to protection zone permits.
4. Clause 69 of Schedule 3A be amended so the ACMA has the power to set standard conditions that would apply to non-protection zone permits.
5. The Minister take note of the concerns raised about potential inconsistency between Schedule 3A and UNCLOS and recognise the need to remove the potential for any inconsistency.
6. 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.

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<sup>1</sup> The paper is available on the ACMA website at [www.acma.gov.au/WEB/STANDARD/pc=PC\\_311993](http://www.acma.gov.au/WEB/STANDARD/pc=PC_311993).

# Introduction

Submarine telecommunications cables link Australia to global communications networks and are vital to the national economy.<sup>2</sup> 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.<sup>3</sup>

Schedule 3A gives the ACMA the power to declare protection zones over submarine cables of national significance, to grant permits to install submarine cables in Australian waters and to set significant penalties for non-compliance.<sup>4</sup> These arrangements have been called the best model legislation for protecting submarine cables.<sup>5</sup> Schedule 3A was enacted by parliament in 2005, and since then the ACMA has declared three protection zones and issued six permits to carriers to install submarine cables.

Clause 89(1) of Schedule 3A requires the ACMA to review the operation of Schedule 3A and report to the Minister five years after the legislation commenced (that is, by 20 September 2010). Clause 89(2) requires that the Minister table the report in each House of the Parliament within 15 sitting days of that House after receiving the report.

On 22 December 2009, the ACMA formally commenced the review of Schedule 3A when the *Submarine cable regulation discussion paper* (the paper) was released on the ACMA website for public consultation.<sup>6</sup> The paper outlined the legislative objectives of Schedule 3A, discussed the ACMA's operational experience, the relevant administrative processes employed by the ACMA as well as some minor administrative issues and potential solutions identified by the ACMA. The paper invited written submissions about the operation of Schedule 3A.

The ACMA consulted directly with stakeholders affected by the regime including marine users, submarine cable owners and operators, indigenous bodies, and government bodies (including federal/state departments and authorities). They were mailed a copy of the paper and invited to make written submissions. There were 18 submissions, which are categorised in Table 1. The industry category includes cable owners and operators, the government category includes federal/state departments and authorities and the other category includes indigenous bodies and a member of the public.

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2 Clause 2, Schedule 3A: *submarine cable* means that part of a line link (within the meaning of section 30): (a) that is laid on or beneath the seabed that lies beneath Australian waters; and (b) that is laid for the purposes that include connecting a place in Australia with a place outside of Australia (whether or not the cable is laid via another place in Australia); and includes any device attached to that part of the line link, if the device is used in or in connection with the line link.

3 Submarine cables vary in size but are commonly between 10mm and 30mm in diameter.

4 Clause 2 of Schedule 3A: *Australian waters* means (a) the waters of the territorial sea (within the meaning of the *Seas and Submerged Lands Act 1973*) of Australia; and (b) the waters of exclusive economic zone (EEZ) of Australia; and (c) the sea above that part of the continental shelf of Australia that is beyond the limits of the EEZ.

5 Issue 45 Submarine Telecoms Forum article titled *Legal protection of submarine cables in Latin America*.

6 [www.acma.gov.au/WEB/STANDARD/pc=PC\\_311993](http://www.acma.gov.au/WEB/STANDARD/pc=PC_311993).

**Table 1: List of respondents<sup>7</sup>**

Industry	Government	Other
AJC Australia	AGD	IWCS
Optus	DoD	NTSCORP
PIPE	AFP	Member of the public
Reach	WA Commerce	
Southern Cross	WA Environment	
Telstra	NSW Industry	
Kordia	NSW Maritime	
	Fremantle Ports	

Some submissions only responded to some of the questions in the paper while others commented on issues outside the scope of the review. For completeness, all the comments in the submissions have been considered by the ACMA when finalising this report. All submissions are available on the ACMA's website.<sup>8</sup>

The following sections of this report discuss the legislative objectives for Schedule 3A, the ACMA's operational experience over the past five years, the feedback in the submissions, the findings of the review and the six recommendations made by the ACMA. The findings and recommendations for each topic are discussed under the following three headings: *Operational experience*, *Minor administrative issues* and *Other matters* and a complete list of findings and recommendations is provided in the *Conclusion* at the end of this report.

<sup>7</sup> The full name of each respondent is listed at Appendix C.

<sup>8</sup> [www.acma.gov.au/WEB/STANDARD/pc=PC\\_311993](http://www.acma.gov.au/WEB/STANDARD/pc=PC_311993).

# Background

Under Schedule 3A, the ACMA has the power to declare protection zones over telecommunications submarine cables of national significance and to grant permits to install submarine cables in Australian waters. Schedule 3A became law in 2005. Since then the ACMA has declared three protection zones and issued six permits to carriers to install submarine cables.

The government provided the ACMA start-up funding to undertake this work. For the period 2003/04–2006/07, \$1.4 million was provided. This funding was used to declare the protection zones, establish the permit process and widely promote the new arrangements.

## Legislative objectives

The *Telecommunications and Other Legislation Amendment (Protection of Submarine Cables and Other Measures) Act 2005*, inserted a new schedule (Schedule 3A—Protection of submarine cables) into the *Telecommunications Act 1997*. Schedule 3A established a regulatory regime for the protection of submarine cables. The *Submarine Cables and Pipelines Protection Act 1963* was also amended so that existing penalties under this Act for damaging a submarine cable did not apply if the cable was in a protection zone.

The explanatory memorandum to the legislation indicates that its main objectives were to<sup>9</sup>:

- > provide security and reliability for the submarine cable component of Australia's national information infrastructure
- > clarify the liability for compensation
- > provide increased consistency and clarity in the Commonwealth telecommunications regulatory regime.

These are achieved by:

- > establishing a scheme for declaring protection zones over submarine cables of national significance
- > prohibiting or restricting activities likely to damage submarine cables inside protection zones<sup>10</sup>
- > creating offences for damaging a submarine cable within a protection zone, punishable by fine or imprisonment<sup>11</sup>
- > establishing a permit regime for the installation of submarine cables in Australian waters inside and outside of protection zones.

Monitoring and enforcement of protection zones is the responsibility of the Australian Federal Police.

## Protection zones

Schedule 3A gives the ACMA the power to declare protection zones over submarine cables of national significance and to grant permits to install submarine cables inside of protection zones. The processes employed by the ACMA are described at Appendix A.

Application charges for declaring, varying or revoking protection zones were established in accordance with the Australian Government Cost Recovery Guidelines.<sup>12</sup>

<sup>9</sup> Explanatory memorandum to the *Telecommunications and Other Legislation Amendment (Protection of Submarine Cables and Other Measures) Bill 2005*. A copy of Schedule 3A and the explanatory memorandum may be downloaded at [www.acma.gov.au/subcables](http://www.acma.gov.au/subcables).

<sup>10</sup> Clauses 10 and 11, Schedule 3A.

<sup>11</sup> Division 4, Part 2, Schedule 3A.

<sup>12</sup> Available from [www.finance.gov.au/publications/finance-circulars/2005/09.html](http://www.finance.gov.au/publications/finance-circulars/2005/09.html).

To date, the ACMA has declared three submarine cable protection zones over submarine cables of national significance, following extensive research and consultation with the Environment Secretary (DEWHA) and other stakeholders.<sup>13</sup> Two protection zones are located off the Sydney coast and a third is located off the Perth coast (see Figures 1 and 2). Figure 3 provides a notional view of a protection zone. The need for these protection zones had been identified specifically in the explanatory memorandum. The ACMA was granted initial funding by government to establish these protection zones. The ACMA has not received any protection zone applications from this time.

An advisory committee must be established under Schedule 3A to advise the ACMA on proposals to declare protection zones. In June 2006, the ACMA established two protection zone advisory committees (PZAC) to provide advice on the declarations of the protection zones foreshadowed in the explanatory memorandum.<sup>14</sup>

### **Sydney protection zones**

In August 2006, the ACMA published initial proposals for two protection zones off the coast of Sydney, with revised proposals published in February 2007. In July 2007, the ACMA declared two submarine cable protection zones: the Northern Sydney Protection Zone, which extends from Narrabeen Beach to 40 nautical miles offshore; and the Southern Sydney Protection Zone, which extends from Tamarama and Clovelly Beach to 30 nautical miles offshore (see Figure 1). Both protection zones came into effect on 1 October 2007, and cover a branch of each of the Australia–Japan cable and Southern Cross cable, and include the area between the cables in a branch. Each zone runs to a depth of approximately 2000 metres.<sup>15</sup>

Since the declaration of the zones, three more cables have been installed in the Sydney area. The Gondwana-1 cable, operated by the Office des Postes et Telecommunications, has been installed in the Northern Sydney Protection Zone. The PPC-1 cable, operated by PIPE, has been installed in the Northern Sydney Protection Zone. The Endeavour cable, operated by Telstra, has been installed in the Southern Sydney Protection Zone.

### **Perth protection zone**

On 28 September 2006, the ACMA published a proposal for a protection zone off the coast of Perth. On 20 September 2007, the ACMA declared the Perth Submarine Cable Protection Zone, which came into effect on 1 February 2008. The Perth Submarine Cable 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. No additional cables have been laid in the Perth Protection Zone since it was declared (see Figure 2).

### **Prohibited, restricted and conditional activities in protection zones**

In the protection zones, activities that could damage submarine cables are prohibited, or are restricted, to the extent they pose a risk of damage to a cable. The prohibited and restricted activities are explicitly stated in each protection zone declaration.<sup>16</sup>

Activities that have been prohibited include such things as:

- > use of or towing, operating or suspending from a ship trawl gear designed to work on or near the seabed, or a mid-water trawl, or a Scottish or Danish seine

<sup>13</sup> For the purposes of Schedule 3A, the Environment Secretary is the Secretary of the Department administered by the Minister who is responsible for administering the *Environment Protection and Biodiversity Conservation Act 1999*. At the time this report was written, the Environment Secretary was the Secretary of the Department of Environment, Water, Heritage and the Arts.

<sup>14</sup> The ACMA is required to refer a proposal for a protection zone to a PZAC under clause 16.

<sup>15</sup> The legislation allows a protection zone to be declared to the edge of the EEZ. However, during the consultation process the PZACs advised that cable damage was unlikely at a depth of greater than 2000 metres and therefore additional protection via protection zones was not required.

<sup>16</sup> Protection Zone Declarations for Northern Sydney, Southern Sydney and Perth Protection Zones are available at website [www.acma.gov.au/subcables](http://www.acma.gov.au/subcables).

- > use of or towing, operating or suspending from a ship a dredge, a demersal longline, including setlines and trotlines
- > use of or towing, operating or suspending from a ship a structure moored to the seabed with the primary function of attracting fish for capture (such as a fish aggregating device).

Activities that have been restricted include:

- > anchoring in a protection zone
- > lowering, raising or suspending a shotline from a ship
- > demersal fishing using J-hooks, use of or towing, operating or suspending from a ship a net anchored to the seabed or a grapnel
- > use of an explosive or explosive device.

Some activities related to marine and energy infrastructure that may cause cable damage can be undertaken, with notification to cable operators. These activities are specified in each declaration. The declarations require that cable operators are notified and consulted at least 21 days prior to the activity commencing and that the activity is undertaken in a manner that is unlikely to cause cable damage.<sup>17</sup>

Examples of notifiable activities include:

- > installing, maintaining or removing an electricity cable, an oil or gas pipeline, any like cables or pipelines and using any associated equipment
- > constructing, maintaining or removing an installation for the use of ships
- > conducting civil engineering work, including constructing and removing navigation aids
- > exploring for or exploiting resources (other than marine species)
- > conducting research that involves contact with the seabed.

## Installation permits

Carriers require a permit from the ACMA to install a submarine cable in Australian waters. To date, the ACMA has granted three protection zone installation permits and three non-protection zone installation permits for cables that connect Australia to Hawaii, Guam and New Caledonia.

The statutory timeframe for consideration of a protection zone installation permit is 20 business days, unless further information is requested by the ACMA.<sup>18</sup> The ACMA has a longer statutory period of 180 days to consider an application for a non-protection zone installation permit, to allow for consultation with stakeholders and consideration of relevant statutory matters.<sup>19</sup> The statutory period for a non-protection zone permit can be extended or further extended by up to 90 days if required.<sup>20</sup>

Application charges for the installation permits are set in accordance with the Australian Government Cost Recovery Guidelines. The application charge for a protection zone permit is \$2,215. Two levels of charge exist for non-protection zone permit applications: \$6,150 when the application is linked to a protection zone permit or \$6,810 otherwise.

For non-protection zone permit applications, a fee of \$25,000 is charged to cover the ACMA's expenditure in the event that an external consultant is required to consider an

<sup>17</sup> The restrictions specified for the Submarine Cable (Northern Sydney Protection Zone) Declaration 2007, Submarine Cable (Southern Sydney Protection Zone) Declaration 2007 and Submarine Cable (Perth Protection Zone) Declaration 2007 are available at website <http://www.acma.gov.au/subcables>.

<sup>18</sup> Clause 57, Schedule 3A.

<sup>19</sup> Clause 73, Schedule 3A.

<sup>20</sup> Clause 73, Schedule 3A.

application. This fee is refundable if not fully utilised.<sup>21</sup> To date, the ACMA has not needed to engage external consultants on any permit application.

The time required to grant each permit is listed in Table 2.

**Table 2: Installation permits granted by the ACMA**

Cable	Permit	Date granted	Statutory time (days)	Elapsed time (days)
Gondwana-1	Protection zone	10 September 2007	20	12
Gondwana-1	Non-protection zone	10 July 2007	180	149
Endeavour	Protection zone	26 October 2007	20	14
Endeavour	Non-protection zone	20 March 2008	180	156
PPC-1	Protection zone	10 March 2008	20	10
PPC-1	Non-protection zone	24 November 2008	180+90*	240

\*The statutory timeframe was extended in this case as additional consultation was required after the carrier proposed a significant change to the route proposed for the cable. This was because of previously unidentified difficult undersea topography.

## International Cable Protection Committee

The ICPC Ltd is an international body with 106 members representing more than 50 countries (at 2009).<sup>22</sup> Members comprise commercial companies owning or operating submarine cables and governmental administrations.

The principal purpose of the ICPC is to promote the safeguarding of submarine cables against man-made and natural hazards. The ICPC also provides a forum for the exchange of technical, legal and environmental information pertaining to submarine cable protection methods and programmes.

Recommendations published by the ICPC are intended as a guide to aid cable owners and other seabed users in promoting reliability and safety in the submarine cable environment. Compliance with the recommendations is voluntary but they provide guidance on submarine cable issues that is based on industry experience around the world. *Recommendation No. 2: Recommended Routing and Reporting Criteria for Cables in Proximity to Others* (ICPC Recommendation No. 2) is referred to in this report.

The recommendations do not affect the rights and obligations of seabed users under international or national laws, for example, the United Nations Convention of the Law of the Sea (UNCLOS) and Schedule 3A respectively.

<sup>21</sup> Clause 7, *Telecommunications (Protection Zone and Submarine Cable Permit—Application Charge) Determination 2008*.

<sup>22</sup> [www.iscpc.org](http://www.iscpc.org).

# Review

Eighteen submissions were received in response to the paper. Some submissions only responded to a subset of the questions in the paper while others commented on issues that were outside the scope of the review. All information in the submissions received was considered by the ACMA when finalising this report.

The paper posed eight questions and submitters were invited to provide answers to each question in their submission. The first four questions addressed operational effectiveness, compliance with the regime and protection zone monitoring. The remaining questions sought comments on minor legislative amendments that were proposed to resolve administrative issues with Schedule 3A that the ACMA has identified. Submitters were also invited to make comments about other matters related to submarine cables.

In the next three sections, *Operational experience*, *Minor administrative issues* and *Other matters*, the answers to the eight questions and the comments about other matters are summarised. The ACMA's findings and recommendations are provided for each topic.

## Operational experience

### Question 1 – Meeting the legislative objectives

The experience of the ACMA indicates that the legislative objectives for Schedule 3A, as outlined in the previous section, have been achieved and that the regulatory processes employed are efficient and effective. Stakeholders were asked the following question about this matter.

*Has the operation of Schedule 3A achieved its objectives? In particular, are the processes for establishing a protection zone and granting an installation permit efficient and effective? How may the present processes be improved?*

The processes referred to are detailed in Appendix A.

### Comments

Of the seven respondents that answered this question, six broadly agreed that the operation of Schedule 3A had met its objectives and that the processes for establishing a protection zone and granting an installation permit was efficient and effective. One respondent partly agreed and 11 respondents did not answer this question.

Telstra stated, its 'experience of the legislation and associated processes lead us to believe the underlying policy objectives are being met'.<sup>23</sup>

PIPE stated, for a protection zone, 'a 12 month timeframe could raise certainty issues for submarine cable business planning' and 'the time taken to grant a permit is an issue in a commercial context'.<sup>24</sup>

NTSCORP stated that a 'strong assessment process and dialogue between (the) ACMA and Aboriginal groups can ensure that the locations are chosen for new protection zones with due regard for areas of special significance and impacts on native title, in order to achieve certainty for proponents'.<sup>25</sup>

AGD noted the effectiveness of protection zones. AGD stated that, 'whilst installing submarine cables close together [in zones] minimises their effect on other users of the sea and seabed, it represents a vulnerability in that should that region be affected by a hazard (for example, a ship dragging anchor, an earthquake or a malicious attack) all submarine

<sup>23</sup> Telstra submission, page 3.

<sup>24</sup> PIPE submission, page 1 and 2.

<sup>25</sup> NTSCORP submission, page 3.

cables in a protection zone in that region are at risk of being damaged'.<sup>26</sup> AGD recommends consideration of these issues when determining the feasibility of any future protection zones. Where possible, diversity should be encouraged.

### **Finding/recommendation**

The ACMA finds that stakeholders are satisfied that the legislative objectives for Schedule 3A have been met (*finding 1*). The ACMA also finds that the administrative processes employed by the ACMA are effective and generally satisfy stakeholders.

The ACMA has noted the suggestion that the times for Schedule 3A regulatory processes should be reduced. In practice, as set out in Table 2, the processing times for applications have been less than those stipulated in the legislation. The ACMA endeavours to reduce timeframes through an ongoing business improvement process; however, as the timeframes in question are predominately for stakeholder consultation there is little scope for reduction without compromising the effectiveness and transparency of the process.

The ACMA acknowledges the AGD's comments that cable co-location can increase the vulnerability and potential impact of damage to submarine cables from a disruptive event. The ACMA also notes that the resilience of critical infrastructure, such as submarine cables, is managed by the AGD and is considered under the *Australian Government's Critical Infrastructure Resilience (CIR) Strategy*. Measures to reduce the risk of submarine cable damage are also discussed under question 4.

The ACMA notes comments about the need to consult traditional owners and Aboriginal stakeholders and clarify the assessment process for protection zones. The ACMA will liaise with NTSCORP about its *Guide to declaring, varying or revoking a protection zone* and ensure adequate clarification is provided in the document.<sup>27</sup>

### **Question 2—The PZAC process**

The ACMA has declared three submarine cable protection zones over submarine cables of national significance, following extensive research and consultation with the Environment Secretary (DEWHA) and other stakeholders. In June 2006, the ACMA established two protection zone advisory committees (PZAC) to provide advice about the protection zones.<sup>28</sup> Stakeholders were asked the following question about the PZAC processes.

*How effective were the PZAC processes and are there any areas where they might be improved?*

The processes referred to are detailed in Appendix A.

### **Comments**

The six respondents that answered this question were all satisfied or largely satisfied that the PZAC processes employed by the ACMA were efficient. Twelve respondents did not answer this question.

NSW Industry stated 'the level of consultation undertaken when the two Sydney submarine cable protection zones were initially established was appropriate. Subsequently, NSW Industry strongly support a similar level of stakeholder engagement during consideration of any establishment, amendment or review of protection zones in NSW waters'.<sup>29</sup>

AJC Australia stated 'the PZAC was effective in terms of providing a consultation forum for the relevant stakeholders prior to the declaration of the Sydney Protection Zones'.<sup>30</sup>

<sup>26</sup> AGD submission, page 1.

<sup>27</sup> [www.acma.gov.au/WEB/STANDARD/pc=PC\\_100223#declaring](http://www.acma.gov.au/WEB/STANDARD/pc=PC_100223#declaring).

<sup>28</sup> The ACMA is required to refer a proposal for a protection zone to a PZAC under section 16.

<sup>29</sup> NSW Industry submission, page 1.

<sup>30</sup> AJC Australia submission, page 3.

Fremantle Ports stated it found the PZAC process to be open and effective. 'All views were considered equally and the ACMA representatives followed up questions and actions with clarity of purpose and efficiently.'<sup>31</sup>

Southern Cross stated the PZAC process 'was quite effective and fair and all stakeholders were represented and given a fair opportunity to express their concerns and requirements. The end result appeared to be a fair compromise of competing interests'.<sup>32</sup>

Submarine cable operators, Southern Cross and Telstra, suggested that future PZACs should include one representative from each carrier with an interest in the protection zone. 'While public submissions are invited, these opportunities may not mitigate the potential for cable operators that are not represented on the PZAC to suffer a material disadvantage.'<sup>33</sup>

Reach, another operator, suggested that future PZACs should be as inclusive as possible and recommended wider consultation.

### **Finding/recommendation**

The ACMA finds that the PZAC processes employed for considering applications for protection zones are efficient and well supported by government and industry stakeholders (*finding 2*).

The ACMA considers the current PZAC membership arrangements balance competing views effectively and provide adequate means for affected cable operators to participate and contribute their individual views during the consultation process. The ACMA notes the recommendation that all cable operators with a commercial interest in a future protection zone should be granted a place on the PZAC. This would require the (legislated) maximum number of members of the PZAC to increase above 12. The ACMA does not support that recommendation.

### **Question 3 – The permit process**

Carriers require a permit from the ACMA to install a submarine cable in Australian waters. To date, the ACMA has granted three protection zone and three non-protection zone installation permits for cables that connect Australia to Hawaii, Guam and New Caledonia.

The statutory timeframe for consideration of a protection zone installation permit is 20 business days, unless further information has been requested. The ACMA has a longer statutory period (180 days) to consider a non-protection zone installation permit, to allow for consultation with stakeholders and consideration of relevant statutory matters. The statutory period for a non-protection zone permit can be extended by up to 90 days if required.<sup>34</sup>

Stakeholders were asked the following question about the submarine cable permit processes.

*Could the submarine cable installation permit application processes be improved in any way? Are the statutory deadlines and application fees fair and reasonable? If not, why not?*

The processes referred to are detailed in Appendix A.

### **Comments**

Of the six respondents that answered this question, five were broadly satisfied with the permit application process and two also commented that the fees were fair and reasonable. One respondent was not satisfied with the processes and 12 respondents did not answer this question.

<sup>31</sup> Fremantle Ports submission, page 1.

<sup>32</sup> Southern Cross submission, page 2.

<sup>33</sup> Telstra submission, page 4.

<sup>34</sup> Clauses 57 and 73, Schedule 3A.

Five respondents recommended that the period allowed for the ACMA to issue non-protection zone permits should be reduced from 180 days. The recommendations include 60 days—IWCS, 90 days—Kordia and 30 days—PIPE. Southern Cross and Telstra recommended shortening the period.

Two respondents, PIPE and Telstra, also suggested that the protection and non-protection zone processes should be combined in conjunction with a reduction in the period allowed for the issue of permits.

PIPE stated ‘the consultation process could be shortened and considers that 10 business days is sufficient time for stakeholder consultation and that further efficiencies can be achieved by only considering strictly relevant matters in the consultation process’.<sup>35</sup>

Telstra stated the ACMA should ‘treat protection and non-protection zone applications as one application where the permits relate to the same cable’.<sup>36</sup>

### **Finding/recommendation**

The ACMA notes that for the three non-protection zone permits granted to date, the time required to complete the process was 149 days (Gondwana-1), 156 days (Endeavour) and 240 days (PPC-1). In the last example the consultation process had to be restarted because the applicant changed the cable route substantially during the permit application process. Schedule 3A makes provision for this circumstance in clause 73.

The ACMA has considered the proposal to combine protection and non-protection permit applications. It does not support the proposal because, first, provision for two cable permit scenarios is required (one where the cable lands in a protection zone and the other where it lands outside a protection zone) and, second, the administrative processes for each permit type are significantly different. For a non-protection zone permit, the parties affected must all be consulted about the impact of laying a cable along the route specified in the permit application. For a protection zone permit the parties affected were already consulted when the protection zone was declared and they have effectively approved laying of cables within the zone. Considering this, there does not appear to be any benefit in combining the protection and non-protection permit applications.

The ACMA finds that the permit processes for considering applications for permits to lay cables are efficient (*finding 3*). The ACMA also finds the application charges appear to be fair and reasonable considering no concerns were raised.

The ACMA notes, under question 1, it responded to a suggestion that the times for Schedule 3A regulatory processes should be reduced. In regard to non-protection zone permits, the processing times for applications, in practice, are less than those stipulated in the legislation, see Table 2. While the ACMA endeavours to reduce timeframes through an ongoing business improvement process, the timeframe in question is predominately for stakeholder consultation and there is little scope for a major reduction without compromising the effectiveness and transparency of the consultation processes.

The ACMA also notes that submarine cable projects typically have long lead times (more than five years) and permit applications may be submitted at the commencement of the project. Consequently, the time required for processing non-protection zone permits can be managed within typical submarine cable project timeframes and the ACMA is not persuaded the current timeframes have a detrimental impact.

### **Question 4—Compliance monitoring and enforcement**

Since the introduction of Schedule 3A there have been no reported incidents of cable damage. Prior to the introduction of the new regime, information in the Schedule 3A

<sup>35</sup> PIPE submission, page 3.

<sup>36</sup> Telstra submission, page 7.

explanatory memorandum indicates that, on a number of occasions, submarine cables had been damaged. The examples quoted include:

- > in July 2001, a trading ship dragged anchor off Sydney and severed two cables, the high capacity Southern Cross cable and the Tasman 1 cable
- > the Tasman 2 cable was broken off the New South Wales coast by trawl fishing in 1997 and the ANZCAN cable was broken by trawl fishing in 1991 off Sydney
- > the SEA-ME-WE3 cable that lands in Perth was cut several times between Singapore and Jakarta by sand dredging operations.

The AFP has the lead role of ensuring compliance with Schedule 3A. The AFP has adopted a complaints based model for investigating alleged breaches of the protection zones. One alleged breach of a protection zone that was reported to the AFP since the regime was introduced was heard by a court and the court returned a not guilty verdict.

In March 2009, industry and government stakeholders participated in a desktop exercise that simulated responses to a major submarine cable outage in Australia. The report on the exercise included a recommendation, as part of this review of Schedule 3A, that current cable protection, monitoring and enforcement arrangements be considered. Stakeholders were asked the following question about compliance monitoring and enforcement.

*Do the existing monitoring and enforcement arrangements in Schedule 3A adequately protect submarine cables from breakage and damage? If not, why not?*

## **Comments**

Of the 11 respondents that answered this question, eight indicated the current protection zone monitoring arrangements were unsatisfactory and suggested active monitoring should occur. All cable owners and operators shared this view. Three other respondents were satisfied with the current arrangements and seven respondents did not answer this question.

The AFP stated that 'its responsibility for the enforcement of the prohibitions and restrictions does not extend to the monitoring of the protection zones to prevent or supervise the safekeeping of the cables in Australian maritime zones'.

The AFP also stated that it is 'not physically equipped with the resources to monitor the protection of cables in Australian waters and relies on agencies such as the Australian Fisheries Management Authority (AFMA) and the Australian Maritime Safety Authority (AMSA) who have the surveillance capacity to perform a monitoring function' for the protection zones.<sup>37</sup>

Kordia stated that it 'would expect proactive monitoring of the cable protection zones that would discourage and pre-empt any excluded activity as opposed to only responding to reported incidents'.<sup>38</sup>

Southern Cross called for a Commonwealth funded monitoring system for the protection zones.<sup>39</sup>

Telstra stated that monitoring of submarine cables and the enforcement of Schedule 3A needs to be strengthened and 'submarine cables of national significance are critical infrastructure and must be afforded the same focus and protection arrangements applying to other types of facilities'.<sup>40</sup>

Optus stated that the legislation 'would not prevent a major submarine cable outage either through deliberate or inadvertent breaches without adequate monitoring. Monitoring needs a review and a solution utilising patrols by existing law enforcement agencies or technical

<sup>37</sup> AFP submission, page 1.

<sup>38</sup> Kordia submission, page 3.

<sup>39</sup> Southern Cross submission, page 3.

<sup>40</sup> Telstra submission, page 7.

systems such as Automated Identification System (AIS)'. Optus also stated that electronic monitoring 'is utilised by submarine cable operators in UK and Asian waters and has been very effective in the prevention of cable incidences'.<sup>41</sup>

AJC Australia stated that in the protection zones 'cost effective electronic surveillance may be surface or sub-surface implementations such as AIMS (Automatic Information Management System) or radar or satellite technologies'.<sup>42</sup> Three others, PIPE, Telstra and WA Commerce, supported electronic monitoring of cables in the protection zones.

The AGD stated that 'the enforcement provisions in Schedule 3A are sufficient. However, it is unclear what form of monitoring the AFP currently undertakes. It would be of value to consider what, if any, arrangements could be put in place to ensure Australia's submarine cables are effectively monitored to ensure users of the sea and seabed comply with the provisions of Schedule 3A'.<sup>43</sup>

### **Finding/recommendation**

The ACMA notes advice from the AGD that enforcement provisions for protection zones under Schedule 3A appear to be adequate. However, as indicated above, only one prosecution has been brought under Schedule 3A. The ACMA will review the process in conjunction with the other agencies involved and consider the lessons learned.

The ACMA notes from the AFP in its submission that the protection zones are not being actively monitored to ensure compliance and that there is considerable support from submarine cable operators and owners for active cable monitoring within protection zones (*finding 4*). As indicated by the Optus submission, a variety of systems and technologies could be used for active monitoring such as AIS. AIS is a short range coastal tracking system used on ships by vessel traffic services (VTS) for identifying and locating vessels by electronically exchanging data with other nearby ships and VTS stations. AIS information supplements, but does not replace, marine radar, which continues to be the primary method of collision avoidance for water transport. Information provided by AIS equipment provides authorities with information on a vessels position, course and speed for tracking purposes.<sup>44</sup> In addition, commercial monitoring systems, such as AIMS (automatic information management system<sup>45</sup>), were identified by stakeholders as also providing a means to proactively monitoring cables in protection zones.

The ACMA acknowledges that active monitoring in protection zones would provide additional protection, which cable owners and cable operators support. Further, as some government bodies currently monitor shipping for compliance purposes, for example, state fisheries, border protection and the AFMA, it may be possible for these agencies to monitor protection zones in conjunction with their other responsibilities.

Further study is required to determine whether compliance monitoring in protection zones is justified. For this purpose the costs and benefits of monitoring options would have to be evaluated. The protection arrangements that carriers currently have in place would also have to be considered.

The ACMA finds that further study is required to determine whether active compliance monitoring in protection zones is necessary and by what means this monitoring could be provided (*finding 5*).

The ACMA recommends that the Minister consult with the Attorney-General about the conduct and funding for a study to determine whether active compliance monitoring in protection zones is necessary and if needed, how this monitoring could be provided (*recommendation 1*).

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41 Optus submission, page 1.

42 AJC Australia submission, page 3.

43 AGD submission, page 2.

44 [www.amsa.gov.au/Shipping\\_Safety/Navigation\\_Safety/Automatic\\_Identification\\_System](http://www.amsa.gov.au/Shipping_Safety/Navigation_Safety/Automatic_Identification_System).

45 [www.dtsgis.com](http://www.dtsgis.com).

## Minor administrative issues

### Question 5—Publishing protection zone proposals

Under Schedule 3A, a proposal for, variation to or revocation of a protection zone must be published by the ACMA in full in the *Gazette*; in newspapers in circulation in the affected states: the ACT and the NT; and, if any external territory is affected by the proposal, in a newspaper circulating generally in that external territory.

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. To reduce costs on protection zone applicants and printing unnecessary information, the stakeholders were asked the following question.

*Should clauses 17 and 32 be amended so that the ACMA is only required to publish a summary of a proposal to declare, vary or revoke a protection zone, with details of how a full proposal may be obtained and/or a requirement to publish the proposal in full on the ACMA website? If not, what disadvantage could flow from publishing only a proposal summary?*

### Comments

Ten of the 11 respondents that answered this question supported the proposal to amend clauses 17 and 32 so that the ACMA is only required to publish a summary of a proposal to declare, vary or revoke a protection zone, with details of how a full proposal may be obtained and/or a requirement to publish the proposal in full on the ACMA's website. Only one of the respondents that answered this question did not support the proposal. Seven respondents did not answer this question.

One respondent, Optus, did not support the proposal and argued that reducing the size of an advertisement may impact on the public awareness of a proposal.

### Finding/recommendation

The ACMA recommends 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 (*recommendation 2*). The ACMA will ensure all advertisements contain a website detailing where to access a full copy of any proposal.

The ACMA notes that in addition to newspaper advertisements, which publicise proposals, it also employs media releases and direct contact with stakeholders as part of an overall consultation strategy.

### Question 6—Protection zone installation permit 75 metre condition

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 the cables must be installed within 75 metres of the route stated in the permit. Additionally, permits stipulate that if a carrier has 'cogent' reasons, the cable route may be varied greater than 75 metres.

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 (topography) reasons for relocating the cable.

It would be administratively more efficient for the ACMA if all protection zone installation permits were granted on the condition that a cable is installed within 75 metres of the route stated in the permit. The stakeholders were asked the following question about this matter.

*Should clause 56 include a standard condition that submarine cables must be installed within 75 metres of the route specified in a protection zone permit? Is this sufficient flexibility? If not, how much leeway (if any) should be allowed?*

## Comments

Of the 10 respondents that answered this question, six supported the proposal to amend clause 56 to include a standard condition that submarine cables must be installed within 75 metres of the route specified in a protection zone permit. Two of these respondents qualified their support. Four respondents did not support the proposal. Eight respondents did not answer this question.

Reach believed the 75 metres condition, 'with current cable laying technology... is achievable'.<sup>46</sup> Telstra also supported this proposal, stating that 'our experience is that these upper cable laying parameters (75 metres in protection zones ...) can be accurately achieved with modern navigation and cable laying techniques'.<sup>47</sup>

Southern Cross supported the proposal, saying 'technology allows for the cable installation to be completed in this manner. However, any conditions imposed under this clause ... should be made consistent with the International Cable Protection Committee (ICPC) guidelines on separation'.<sup>48</sup>

Two cable operators, Optus and PIPE, took the opposite view and argued that 75 metres may not allow operators enough flexibility during installation. In particular, Optus stated that it 'may preclude the best lay for a new submarine cable away from unforeseen underwater topography. Limiting the variance may effectively weaken the long term reliability of a new submarine cable if the best location is not installed inside the protection zone'.<sup>49</sup>

PIPE did not consider that this proposal provides sufficient flexibility and was concerned that a route variation 'only becomes apparent whilst the cable is being laid and stopping a ship to allow time for the ACMA to consider the request could be very costly'.<sup>50</sup>

IWCS stated 'it is not practical to guarantee that the cable will be laid with 75m. If you want some tolerance ... then some language providing a degree of reasonable endeavours to install the cable within 75m of the centreline is appropriate'. It was also suggested that a graduated scale be implemented, allowing a greater variance from the 'centreline' of the cable, the deeper the water.<sup>51</sup>

## Finding/recommendation

The ACMA notes the objections to this proposal refer to the amount of flexibility the condition provides and not the proposal to provide flexibility. In principle, the more variation provided the greater the flexibility for industry. However, greater variation also creates greater uncertainty about the environmental impact on the seabed and increases the difficulty of assessing that impact. These contrary effects need to be balanced while accommodating practical limits in navigation and cable laying techniques for ships that lay and repair submarine cables.

Considering these matters, over the past five years a variation limit of 75 metres has been acceptable on all the protection zone permits granted. In one instance the cable owner presented cogent reasons for relocating the cable approximately 200 metres under the current provisions. ICPC Recommendation No. 2 does not provide guidance on this matter.

The introduction of a standard condition through an open and transparent process could balance the contrary effects identified, provide greater certainty for industry and achieve administrative efficiency. The ACMA recommends that clause 56 of Schedule 3A be amended so 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 (*recommendation 3*). The current ACMA power to enable amendment to a permit after it is granted, if the applicant has cogent reasons, would be unchanged.

<sup>46</sup> Reach submission, page 2.

<sup>47</sup> Telstra submission, page 9.

<sup>48</sup> Southern Cross submission, page 4.

<sup>49</sup> Optus submission, page 2.

<sup>50</sup> PIPE submission, page 4.

<sup>51</sup> IWCS submission, page 2.

### **Question 7—Non-protection zone installation permit half nautical mile condition**

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.<sup>52</sup> To date, this condition has provided sufficient flexibility when installing cables.

It would be administratively more efficient and effective for the ACMA if all non-protection zone installation permits were granted on the condition that cables are installed within a half nautical mile of the route stated in the permit. This requirement would also provide all carriers and stakeholders with clearer details of a cable's specific location. Stakeholders were asked the following question.

*Should clause 69 include a standard condition that submarine cables must be installed within half a nautical mile (nm) of the route specified in a non-protection zone permit? If not, why?*

### **Comments**

Of the 10 respondents that answered this question, six supported the proposal to amend clause 69 to include a standard condition that submarine cables must be installed within half a nautical mile of the route specified in a non-protection zone permit. Two of these respondents qualified their support. Four respondents did not support the proposal. Eight respondents did not answer this question.

Telstra stated that 'cables tend to sink vertically from the point which they are deployed by the cable ship and generally lay within metres of the track taken by the cable laying vessel'.<sup>53</sup>

Southern Cross did not consider the inclusion of the half nautical mile condition 'at all problematic as technology allows for cable installation to be completed in this manner'. Southern Cross qualified its support by stating that 'any conditions imposed under this clause 69 should be made consistent with ICPC guidelines on cable separation and should allow flexibility in the application of the clause'.<sup>54</sup>

IWCS stated it does not consider that a half nautical mile variance is achievable in deep water. It was also suggested that this condition should be for an operator to employ 'reasonable endeavours to install the cable with 0.5 nm of the (cable's) centreline'.<sup>55</sup>

Optus did not support this proposal and is concerned that 'administrative efficiencies for the ACMA should not be reason enough to preclude a new submarine cable being laid in the best topographic position, even if it is outside of the position identified in the non-protection zone installation permit'.<sup>56</sup>

PIPE stated it does not support the proposal, as 'deploying a cable in deep water to this level of accuracy is difficult to achieve. Evidencing compliance with such a condition would be even harder to show'. PIPE has suggested a 'best endeavours' inclusion if the suggested change is made to Schedule 3A.<sup>57</sup>

<sup>52</sup> Half a nautical mile equals 926 metres.

<sup>53</sup> Telstra submission, page 9.

<sup>54</sup> Southern Cross submission, page 4.

<sup>55</sup> IWCS submission, page 2.

<sup>56</sup> Optus submission, page 2.

<sup>57</sup> PIPE submission, page 4.

## Finding/recommendation

The ACMA notes the objections to this proposal refer to the amount of flexibility the condition provides and not the proposal to provide flexibility. In principle, the more variation provided the greater the flexibility for industry. However, similar to question 6, greater variation also creates greater uncertainty about the environmental impact on the seabed and increases the difficulty of assessing that impact. These contrary effects need to be balanced while accommodating practical limits in navigation and cable laying techniques for ships that lay and repair submarine cables.

Considering these matters, over the past five years a variation limit of half a nautical mile has been acceptable on all the non-protection zone permits granted. ICPC Recommendation No. 2 does not provide guidance on this matter.

The introduction of a standard condition through an open and transparent process could balance the contrary effects identified, provide greater certainty for industry and achieve administrative efficiency. The ACMA recommends that clause 69 of Schedule 3A be amended so 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 (*recommendation 4*). The ACMA's power currently to amend a permit after it was granted, if the applicant has cogent reasons, would be unchanged.

## Question 8—Managing cable co-location disputes

Clause 71(d) of Schedule 3A states that one of the matters the ACMA must have regard to before it makes a decision about a non-protection zone permit application is whether a new cable is co-located with an existing installation. If a co-location issue arises during consultation, the ACMA takes the recommendations of the ICPC as a guide.

However, Schedule 3A does not deal with co-location 'disputes' between an applicant for an installation permit and an existing cable operator. When a dispute arises, the ACMA considers that direct negotiation between a permit applicant and an affected cable operator is the best way to resolve a co-location dispute.

The ACMA proposed that the insertion of additional text in Schedule 3A requiring cable co-location disputes to be negotiated within a reasonable timeframe or arbitrated if involved parties are unable to resolve a matter, would address co-location disputes if they arose.

For example, Schedule 3A could allow existing cable operators to indicate that a dispute exists. A specified timeframe would then be allowed for the parties to resolve the dispute or, failing this, resolve by arbitration by, or on behalf of, the ACMA, in consultation with the ACCC. Stakeholders were asked the following question.

*Should Schedule 3A be amended, for example, by adding the additional provisions suggested above? If not, what disadvantage may stem from this amendment? How could Schedule 3A and the ACMA better address disputes about co-location of cables outside of protection zones? Would a formal arbitration process be the best methodology for achieving an enforceable outcome or would an administrative hearing or some other structure be better?*

## Comments

Of the nine respondents that answered this question, five did not support the proposal to amend Schedule 3A to require submarine cable co-location disputes to be negotiated within a reasonable timeframe or arbitrated if involved parties are unable to resolve a matter. Four respondents supported the proposal, with qualifications. Nine respondents did not answer this question.

IWCS, a submarine cable consultancy, supported the inclusion of a dispute resolution mechanism in Schedule 3A, with response timeframes and a defined escalation process chaired by the ACMA.<sup>58</sup>

<sup>58</sup> IWCS submission, page 2.

Kordia stated that ‘as a new entrant, having access to binding arbitration is an important improvement to the regulation and supports the growth of competition which is ultimately in the best interests of Australia’.<sup>59</sup>

AJC Australia stated that the co-location guidelines contained in the ICPC guidelines are adequate and do not support any amendment to Schedule 3A. Similarly, Fremantle Ports stated that ‘disputes could be resolved without arbitration or the involvement of the ACCC’.<sup>60</sup>

Reach stated that ‘any dispute resolution process administered by the ACMA would be too regimented for the submarine cable industry’ and that ‘the ICPC guidelines, if adhered to by industry, are sufficient to avoid disputes of this nature’.<sup>61</sup> Likewise, Southern Cross stated that disputes are unlikely if ICPC guidelines are adhered to.

Telstra stated that it does not support proposals that would set timeframes for resolving disputes or any proposal for arbitration by the ACMA in consultation with the ACCC. Telstra also stated that any dispute resolution mechanism would be unique to Australia and has not been adopted elsewhere in the world. Telstra believes that changes to Schedule 3A are not required to address co-location issues, ‘given the existence of ICPC guidelines that Telstra and other cable operators comply with, and the need for Australian processes to be aligned with those arrangements’.<sup>62</sup>

Optus supported a dispute resolution mechanism as ‘disputes may be in the favour of the existing submarine cable owner. A formal and binding arbitration would alleviate any unfair delays that could arise under the current arrangement’.<sup>63</sup> Optus suggested that the ACMA should seek input from the ICPC about the methods of dispute resolution employed in other countries.

PIPE stated that it does not support involvement of the ACMA in resolving co-location disputes and submits ‘that co-location should not be a matter for the ACMA in the decision making process’.<sup>64</sup>

### **Finding/recommendation**

The ACMA notes that in the past five years, only one submarine cable co-location dispute occurred (to the ACMA’s knowledge) and this was resolved by the parties involved. The parties to that dispute have both made submissions to the review which support the current arrangements. The ACMA also notes that there is strong support from industry already utilising the zones for the status quo, which is based on the application of ICPC guidelines, and also support from industry not currently using the zones (Optus and Kordia) for dispute resolution.

Three new submarine cables have been laid in Australian waters during the past five years. These cables were laid in the two protection zones off the coast of NSW. The ACMA has found that these zones are crowded—refer to the discussion within Crowding of cables in protection zones off New South Wales later in this report. A consequence of crowding is that the owner of a new cable, wishing to utilise one of these zones, would require agreements with the owners of cables already in the zone or, alternatively, the cable could exit the zone before the optimal depth for protecting the cable is reached. This means that incumbents have an advantage over the new entrants and could use it for their own commercial advantage.

The ACMA finds that co-location disputes are not currently a problem (*finding 6*). The ACMA notes that in the future the number of submarine cables is likely to increase and the probability of disputes will also increase. It may be appropriate to consider an alternative

<sup>59</sup> Kordia submission, page 5.

<sup>60</sup> AJC Australia submission, page 4.

<sup>61</sup> Reach submission, page 1.

<sup>62</sup> Telstra submission, page 10.

<sup>63</sup> Optus submission, page 2.

<sup>64</sup> PIPE submission, page 5.

legislated dispute resolution mechanism if disputes become a problem in the future. Therefore, the ACMA will continue to monitor co-location disputes and assess whether a problem exists that warrants regulatory consideration.

## Other matters

### The United Nations Convention of the Law of the Sea

Two respondents suggested that elements of Schedule 3A may be inconsistent with Article 79 of the 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.<sup>65</sup>

UNCLOS is an international agreement to which Australia is a signatory. 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 marine natural resources.

Article 79 of UNCLOS relates to submarine cables and pipelines on the continental shelf and provides that:

- > All States are entitled to lay submarine cables and pipelines on the continental shelf, in accordance with the provisions of this article.
- > Subject to its right to take reasonable measures for the exploration of the continental shelf, the exploitation of its natural resources and the prevention, reduction and control of pollution from pipelines, the coastal State may not impede the laying or maintenance of such cables or pipelines.
- > The delineation of the course for the laying of such pipelines on the continental shelf is subject to the consent of the coastal State.
- > Nothing in this Part affects the right of the coastal State to establish conditions for cables or pipelines entering its territory or territorial sea, or its jurisdiction over cables and pipelines constructed or used in connection with the exploration of its continental shelf or exploitation of its resources or the operations of artificial islands, installations and structures under its jurisdiction.
- > When laying submarine cables or pipelines, States shall have due regard to cables or pipelines already in position. In particular, possibilities of repairing existing cables or pipelines shall not be prejudiced.

### Comments

Southern Cross stated that it:

'has an overarching concern that the United Nations Convention on the Law of the Seas (UNCLOS) ratified by Australia on 5 October 1994 and in force from 16 November 1994 is not being applied consistently in the Australian jurisdiction.

UNCLOS, Article 79, requires the State do not impede the laying or maintenance of cables or pipelines. However nothing in Article 79 affects the rights of the State to establish conditions for cables or pipelines entering its territory or territorial sea, or its jurisdiction over cables and pipelines. When determining consistency with UNCLOS Southern Cross note that Schedule 3A defines the area of the protection zone in clause 9 and then sets out the prohibited activities in clause 10 and the restricted activities in clause 11. This is all consistent with UNCLOS. However, Southern Cross does not believe the requirement for permitting outside the protection zone and within Australian waters is consistent with UNCLOS and we submit that ACMA

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<sup>65</sup> Australian waters means:

- > the waters of the territorial sea
- > the waters of the exclusive economic zone of Australia
- > the sea above that part of the continental shelf of Australia that is beyond the limits of the exclusive economic zone of Australia.

need to address this inconsistency in the legislative review. Therefore Southern Cross submits that permits for non-protection zones should only apply out to 12 nautical miles so as to be consistent with UNCLOS. This would allow the freedom of ships to lay and maintain cables on the high seas.<sup>66</sup>

Telstra stated that:

‘In its current form the legislation purports to require a permit to install a cable anywhere within the Australian EEZ.

This is beyond the scope of Australian territorial waters and is arguably inconsistent with UNCLOS. This approach, which we understand has been the topic of ongoing debate within the ICPC, could encourage other nations to consider imposing similar regimes on Australian cable operators crossing non Australian EEZs (for example, Telstra is aware of previous issues with laying cables through the EEZ of the Solomon Islands and the EEZ of the Federated States of Micronesia)...

This matter may be seen as a breach of the UNCLOS which merely requires operators to give notification of laying cables in a country’s EEZ (but not beyond its territorial waters). The issue is important from a public policy and international convention perspective and may place the Australian government in a difficult position when trying to defend the rights of Australian citizens to transit cables through the EEZs of other nations.<sup>67</sup>

### **Finding/recommendation**

The ACMA notes 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.

The ACMA understands that the government is already aware of the potential inconsistency between Schedule 3A and UNCLOS and that DBCDE is well advanced in its consideration of this issue. The ACMA recommends that the Minister take note of the concerns raised about potential inconsistency between Schedule 3A and UNCLOS and recognise the need to remove the potential for any inconsistency (*recommendation 5*).

### **Protection zones for cables in Australian waters**

Some submissions suggested extending the protection afforded by Schedule 3A to submarine cables which are wholly laid on or beneath the seabed that lies beneath Australian waters. Section 2 of Schedule 3A currently precludes this consideration because the type of submarine cable applicable must connect a place in Australia with a place outside of Australia (that is, not in Australian waters).

Further, if the ACMA assesses an application for a protection zone it must have regard to whether the submarine cable(s) protected have ‘national significance’. While this term is not explicitly defined in Schedule 3A, guidance is provided in the explanatory memorandum, which states in a list of considerations, ‘the cable must link Australia to another country with extensive telecommunications infrastructure to carry data and voice traffic to other global destinations and/or cater for significant bilateral business’.

Schedule 3A precludes the declaration of a protection zone over a submarine cable(s) wholly laid on or beneath the seabed that lies beneath Australian waters. While the ACMA has some discretion to interpret the meaning of national significance, this is not relevant if the submarine cable or cables in question are outside the scope of Schedule 3A.

66 Southern Cross submission, direct quote, page 1.

67 Telstra submission, page 10.

## Comments

Telstra stated the 'national significance' criteria should be extended to cover a broader class and increased number of telecommunications submarine cables, including those that fall only within Australian territorial waters. In particular, Telstra suggests that more focus be placed on the importance of such cables to the national economy and recommends the ACMA undertake some focussed consultation with submarine cable operators and state and territory governments administering programs that offer protection to cables and other types of essential infrastructure. Southern Cross also stated that national significance is too limiting.

WA Commerce said there is a need for a cable protection zone for submarine cables connecting the oil platforms in the North West Shelf, as 'there are \$130 billion of petroleum projects under construction or planned in Western Australia. This includes the Browse Basin and Gorgon developments'. WA Commerce also called for the extension of protection zones to existing submarine cables, for example JASAUARAUS, which can be used in an emergency backup situation.<sup>68</sup>

## Finding/recommendation

The ACMA notes the support for broadening the scope of Schedule 3A so that the benefits of a protection zone can be provided to other cables, in particular, submarine cables that have national significance but do not link Australia to global communications systems in other countries.

The ACMA finds that it would be beneficial to provide protection zones around other submarine cables with national significance, including submarine cables that are wholly laid on or beneath the seabed that lies beneath Australian waters (*finding 7*).

The ACMA recommends 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 (*recommendation 6*).

## Declaring a different protection zone

The *Administrative Decisions (Judicial Review) Act 1977* says that a person may seek a statement of reasons for an administrative decision made under Schedule 3A.

This requirement is repeated in clause 7(1) of Schedule 3A where an administrative decision is made not to declare a protection zone. However, in clause 7(2), where a legislative decision is made to declare a zone that is different to the original proposal, this requirement is not repeated. This is because the *Legislative Instruments Act 2003* provides for explanatory memoranda to explain legislative decisions.

## Comments

Telstra stated that a requirement to provide a statement of reasons has been omitted from clause 7(2) in Schedule 3A. It recommends clause 7(2) should be corrected so as not to contradict the *Administrative Decisions (Judicial Review) Act 1977*.

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<sup>68</sup> WA Commerce submission, page 1.

### **Finding/recommendation**

The ACMA notes that Schedule 3A and the *Administrative Decisions (Judicial Review) Act 1977* are consistent. However, to avoid misunderstanding, the ACMA finds that it should amend its *Guide to declaring, varying or revoking a protection zone* so that applicants for protection zones are told about the different way information is conveyed to them for legislative and administrative decisions (*finding 8*).

### **Crowding of cables in protection zones off New South Wales**

A lack of space in the existing protection zones off the coast of New South Wales for new cable installations was highlighted by several respondents. By considering the location of cables in the protection zones off the New South Wales coast and applying the ICPC Recommendation No.2, cable capacity can be calculated.<sup>69</sup> The two zones can theoretically accommodate up to three equally spaced cables that run the length of the zones, see Figure 3. If more cables are installed that run the length of the zone then typically cable owners enter into agreements to manage the consequences for cable maintenance and repair. The ACMA understands that this is the situation for the owners of cables within both zones off the New South Wales coast.

Considering the shape of the zone, in particular the wider mouth closer to shore, and applying the ICPC Recommendation No.2, the two zones can theoretically accommodate up to 10 cables (approximately) at 100 metres water depth. However, the trade-off in these circumstances is most of the cables must exit the zone before the optimum water depth (2000 metres) is reached. Two thousand metres is the depth at which the risk of cable damage is minimised.

### **Comments**

AGD stated that it 'notes and shares industry concerns with regard to the density of cable landing points on the eastern seaboard, in particular the Northern Sydney Protection Zone. This protection zone is so congested that, in order to lay a new cable there, cable companies are required to negotiate with companies with existing cables to agree on how cable paths would cross'.<sup>70</sup>

A similar view was expressed by IWCS: 'The current inventory of PZ space off the east coast of Australia ... is almost exhausted and any future cables in the northern protection zone will need to make even more technical compromises than we had to make on PPC-1'.<sup>71</sup>

### **Finding/recommendation**

The ACMA finds that the space available for new cables within the existing protection zones, off the coast of New South Wales, is limited (*finding 9*). New cables could not be laid in these zones without agreements between the cable owners or unless the new cables exited the zone before the optimum water depth of 2000 metres.

The ACMA notes that Schedule 3A already provides a means by which industry can address the problem, being an application under Schedule 3A to vary or create a protection zone in relation to nationally significant cables.

<sup>69</sup> ICPC guidelines recommend cable separation on the seabed should be at least three times the water depth.

<sup>70</sup> AGD submission, page 2.

<sup>71</sup> IWCS submission, page 1.

# Conclusion

The review of Schedule 3A found that the submarine cable protection regime operates effectively and it plays an important role in protecting submarine cables around Australia. The ACMA's findings and recommendations are listed below.

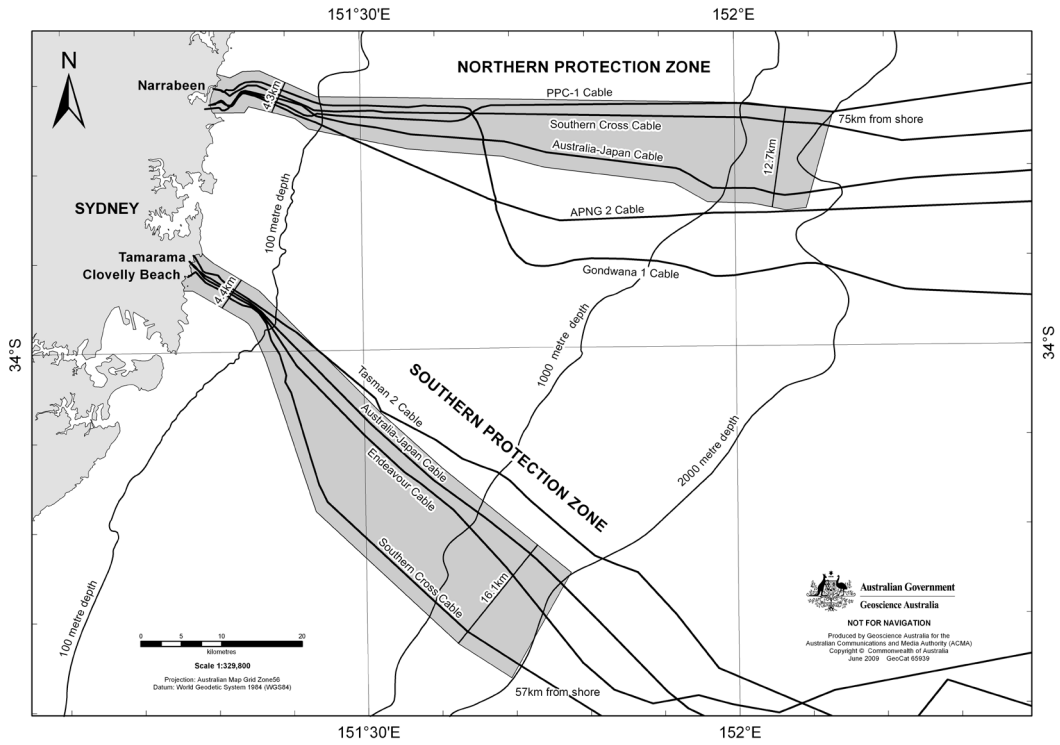
## Findings:

1. Stakeholders are satisfied that the legislative objectives for Schedule 3A have been met.
2. The PZAC processes employed for considering applications for protection zones are efficient and well supported by government and industry stakeholders.
3. The permit processes for considering applications for permits to lay cables are efficient.
4. The protection zones are not being actively monitored to ensure compliance and that there is considerable support from submarine cable operators and owners for active cable monitoring within protection zones.
5. Further study is required to determine whether active compliance monitoring in protection zones is necessary and by what means this monitoring could be provided.
6. Co-location disputes are not currently a problem.
7. It would be beneficial to provide protection zones around other submarine cables with national significance, including submarine cables that are wholly laid on or beneath the seabed that lies beneath Australian waters.
8. The ACMA should amend its *Guide to declaring, varying or revoking a protection zone* so that applicants for protection zones are told about the different way information is conveyed to them for legislative and administrative decisions.
9. The space available for new cables within the existing protection zones, off the coast of New South Wales, is limited. New cables could not be laid in these zones without agreements between the cable owners or unless the new cables exited the zone before the optimum water depth of 2000 metres.

## Recommendations:

1. The Minister consult with the Attorney-General about the conduct and funding for a study to determine whether active compliance monitoring in protection zones is necessary and if needed, how this monitoring could be provided.
2. 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.
3. Clause 56 of Schedule 3A be amended so the ACMA has the power to set standard conditions that would apply to protection zone permits.
4. Clause 69 of Schedule 3A be amended so the ACMA has the power to set standard conditions that would apply to non-protection zone permits.
5. The Minister take note of the concerns raised about potential inconsistency between Schedule 3A and UNCLOS and recognise the need to remove the potential for any inconsistency.
6. 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.

**Figure 1: New South Wales submarine cable protection zones**



**Figure 2: Western Australia submarine cable protection zone**

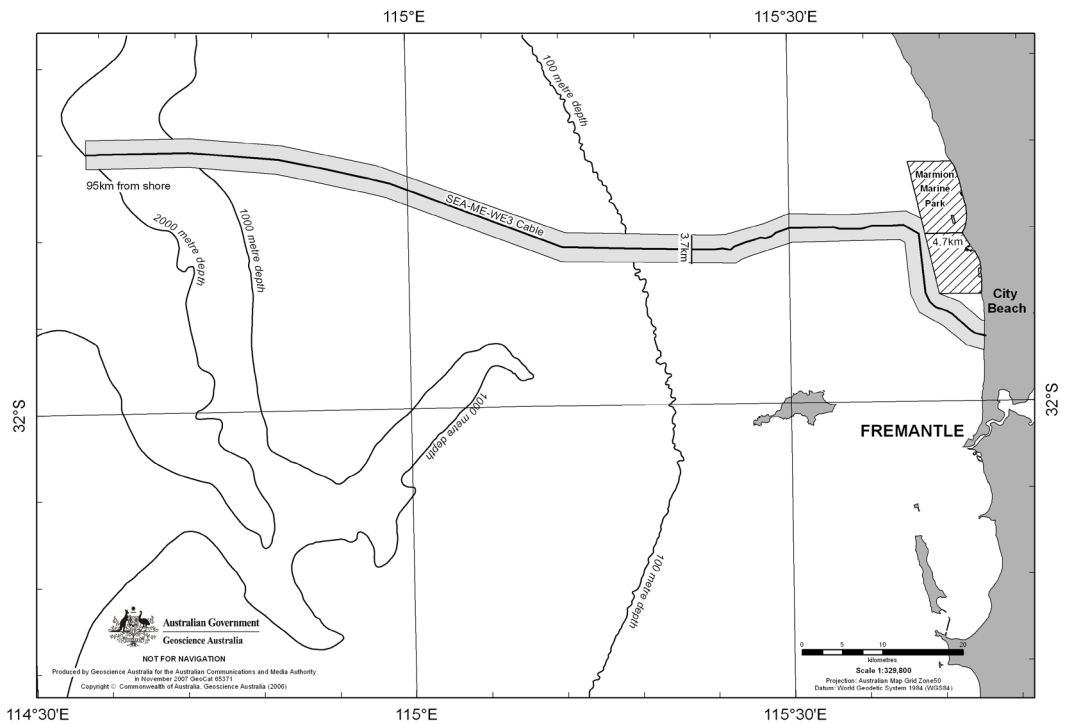
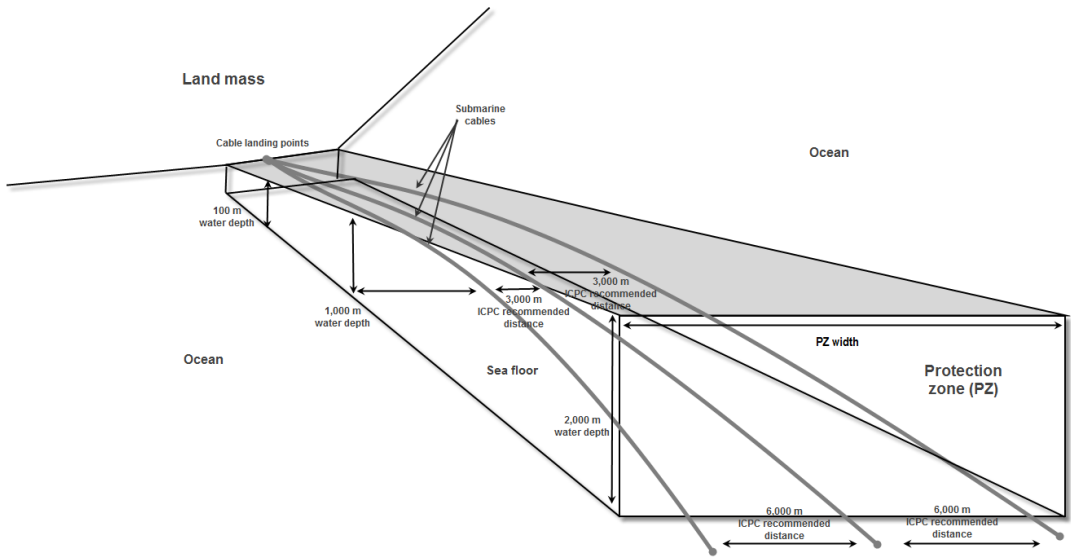


Figure 3: Protection zone shape



# Appendix A:

## Regulatory processes

The regulatory processes for Schedule 3A, which the ACMA administers, are described below.

### Protection zones

Schedule 3A prescribes the process for the ACMA to consider declaring a protection zone on its own initiative or in response to a request. The process is summarised below:

- > the ACMA must develop a proposal for the protection zone (clause 15). This must include identifying details of relevant cable(s), and their location(s), and identifying what activities are currently undertaken in the area
- > the ACMA must be satisfied that the cable(s) is nationally significant (clause 18)
- > the ACMA must refer the proposal to a PZAC for advice (clause 16)
- > the ACMA must publish the proposal for public and other prescribed consultation purposes (clause 17)
- > the ACMA must decide whether to declare a protection zone within 12 months of publishing a proposal (clause 22).

### Installation permits

Schedule 3A prescribes the processes for the ACMA to grant a permit to a cable owner to install or lay a submarine cable within a protection zone (known as a protection zone permit) or outside a protection zone within Australian waters (known as a non-protection zone permit).

#### Permit to install cable in a protection zone

The process to permit a carrier to install submarine cables in a protection zone is as follows:

- > a written application must be made in an approved form to the ACMA (clause 52) and be accompanied by an application fee payment (clause 53)
- > further information may be requested by the ACMA (clause 55)
- > the ACMA must grant or refuse the application after consideration within 20 business days from lodgement (clauses 56 and 57).

#### Permit to install cable outside a protection zone in Australian waters

The process to permit a carrier to install submarine cables outside a protection zone and to the edge of Australia's EEZ is:

- > a written application must be made in an approved form to the ACMA (clause 64 and 65) and be accompanied by an application fee payment (clause 66)
- > further information must be provided if requested by the ACMA (clause 68)
- > the ACMA must consult with the Environment Secretary and other parties as considered relevant (clause 70)
- > the ACMA must have regard to matters outlined in Schedule 3A (clause 71) and environmental and heritage considerations (clause 72)
- > the ACMA must grant or refuse (clause 69) the application within 180 days (clause 73).

### Compliance and enforcement

Compliance monitoring and enforcement for the protection zones is the responsibility of the AFP. The ACMA refers any reports it receives about alleged illegal activity to the AFP for investigation.

Schedule 3A imposes a number of offences related to damaging a submarine cable in a protection zone (clause 36 to 39) and criminal penalties for engaging in prohibited or restricted activities in a protection zone (clauses 40 to 44). The penalties for a breach of Schedule 3A may include fines of up to \$66,000 and/or 10 years' imprisonment for an individual and fines of up to \$330,000 for a corporation.

**Other**

Additional provisions in part 4 of Schedule 3A deal with the process for compensation for financial loss or damage as a result of action by a carrier in regard to submarine cables.

# Appendix B:

## List of acronyms

ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communications and Media Authority
AFMA	Australian Fisheries Management Authority
AFP	Australian Federal Police
AMSA	Australian Maritime Safety Authority
DBCDE	Department of Broadband, Communications and the Digital Economy
DEWHA	Department of the Environment, Water, Heritage and the Arts
DOFD	Department of Finance and Deregulation
DoD	Department of Defence
EEZ	Exclusive Economic Zone
ICPC	International Cable Protection Committee
NSW	New South Wales
PZAC	Protection Zone Advisory Committee
Schedule 3A	Schedule 3A of the <i>Telecommunications Act 1997</i>
UNCLOS	United Nations Convention on the Law of the Sea
WA	Western Australia

# Appendix C:

## List of submitters names in full

AJC Australia	Australia–Japan Cable (Australia) Limited
AGD	Attorney-General's Department
AFP	Australian Federal Police
DoD	Department of Defence, Defence Support Group
Fremantle Ports	Port Operations, Asset and Infrastructure Management
IWCS	IWCS Pty Ltd
Kordia	Kordia Ltd
Member of the Public	Terry Paget
NSW Industry	Government of NSW Industry and Investment, Fisheries Resource Management
NSW Maritime	Government of NSW Maritime
NTSCORP	Native Title Service Corporation Limited
Optus	Optus Networks Pty Ltd
PIPE	Pipe International Pty Ltd
Reach	Reach Cable Networks Ltd, International Cable Planning
Southern Cross	Southern Cross Cables Ltd
Telstra	Telstra Corporation Ltd
WA Commerce	Government of WA, Department of Commerce
WA Environment	Government of WA, Department of Environment and Conservation



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