MINISTRY OF TRANSPORT
TE MANATŪ WAKA

17 March 2026 OC260064

Hon James Meager **Action required by:**

Associate Minister of Transport (Lead Minister for Maritime Security) Monday, 30 March 2026

PROGRESS REPORT ON IMPROVEMENTS TO THE RESILIENCE AND SECURITY OF NEW ZEALAND'S CRITICAL UNDERWATER INFRASTRUCTURE

Purpose

Update you on progress with implementation of the options you selected for improving the resilience and security of New Zealand's critical underwater infrastructure (CUI).

Key points

- In October we presented you, as the Lead Minister for Maritime Security, with New Zealand's first CUI threat assessment (Appendix 1) and the findings of a review into the resilience and security of New Zealand's CUI.
- Compared to international best practice we are generally well set up but because of the growing international threat to CUI and the significant impact CUI damage could have, you directed officials to begin work on 10 no-cost, low-effort options, that mitigate our greatest vulnerabilities and improve our ways of working with industry and regional partners.
- This briefing gives you a progress report on those options (graphically summarised in Appendix 2) and provides a recap of the review's findings which can be forwarded to the Minister for National Security and Intelligence: Eight options are either in place or progressing as expected with two options dependent on partners.
- s 9(2)(f)(iv)
- You also directed officials to report back to you should the threatscape change and to report biennially via a Threat Assessment and updated review of our CUI regime. This is now in place.

Recommendations

We recommend you:

1. **Note** the progress being made with implementing the options for improving the security and resilience of New Zealand's critical underwater infrastructure.
2. **Indicate** if you would like to launch the National Surveillance and Warning capability. Yes / No
3. **Refer** this briefing to:
    a. Rt Hon Christopher Luxon, Minister for National Security and Intelligence
    b. Rt Hon Winston Peters, Minister of Foreign Affairs
    c. Hon Judith Collins, Minister of Defence
    d. Hon Paul Goldsmith, Minister for Media and Communications
    e. Hon Simon Watts, Minister of Energy and Resources

s 9(2)(a)

Felicity Thurston
Acting Manager Resilience and Security
16 / 03 / 2026

Hon James Meager
Associate Minister of Transport
..... / ..... / .....

Minister's office to complete: ☐ Approved ☐ Declined ☐ Seen by Minister ☐ Not seen by Minister ☐ Overtaken by events

Comments

Contacts

Name	Telephone	First contact
Felicity Thurston, Acting Manager Resilience and Security	s 9(2)(a)	
Gavin Birrell, National Strategic Coordinator Maritime Security, Maritime Security Oversight Committee Secretariat	s 9(2)(a)	✓

PROGRESS REPORT ON IMPROVEMENTS TO THE RESILIENCE AND SECURITY OF NEW ZEALAND'S CRITICAL UNDERWATER INFRASTRUCTURE

Background

1 Submarine cables are critical to our economy providing over 99 percent of our international internet and the Cook Strait power cable provides up to 30 percent of the North Island's power.

New Zealand's CUI regime is privately owned, operated and funded

2 The government's role is limited to regulation and enforcement when marine activities breach the Submarine Cables and Pipelines Protection Act 1996[1] (the Act).

3 [COMMERCIAL IN CONFIDENCE] As a market-led activity, cable operation must be economically viable for investors. Cable installation in New Zealand is costly due to the distances and deep water involved; a new cable from the US to New Zealand costs an estimated $1 billion[2]. Importantly, providing an effective regime to protect these investments is industry's key demand on government.

4 This market-led model includes collective responses to disruptions with companies cooperating during disruption events. For telecommunications cables, this cooperation extends to our wider region via the South Pacific Marine Maintenance Agreement[3] which sees a cable repair ship either laying cable or on standby to respond to cable breaks from its home port in Fiji.

Review of the resilience and security of our critical underwater infrastructure (CUI)

5 Following the Minister for National Security and Intelligence's (NSI) direction, officials began a review of our CUI. The Maritime Security Oversight Committee Secretariat led this review, working with the Ministry of Transport (Resilience and Security Team), Ministry of Business, Innovation and Employment (Communications, Infrastructure, and Trade and Energy Branches), and the Department of the Prime Minister and Cabinet (DPMC) (National Security and Resilience Group).

The review's scope

6 The review covered submarine cables providing inter-island, inter-regional and international telecommunications, and the Cook Strait electricity cables. Collectively these are called critical underwater infrastructure (CUI), aligned with the DPMC-led Critical Infrastructure programme [CAB-26-MIN-0047 refers] and our international security partners.

Review methodology – threat, impact and risk

7 [RESTRICTED] To identify the threats to New Zealand's CUI, the review commissioned New Zealand's first CUI Threat Assessment (see Appendix 1). Once potential threats were identified, the risk with and without additional options being implemented was evaluated. The review also compared us to international best practice and s 6(a) [redacted]

[1] For example: Ministry of Transport v Duff [2018] NZDC 3942, where the defendant pleaded guilty to being a master of a ship that conducted fishing operations in a protected area. Mr Duff was sentenced to a fine of $12k (the maximum penalty being $100,000 under section 15(a) of the Act). Other successful prosecutions occurred in 2005, 2010, 2013, 2015 and 2016.

[2] s 6(a) [redacted]

[3] A service agreement between 16 cable operators in the Pacific region.

Threat assessment

8 [RESTRICTED] The Threat Assessment found that the most likely threats to our CUI are from fishing, anchoring and seismic activity. s 6(a) [redacted]

9 s 6(a) [redacted]

10 s 6(a) [redacted]

Our CUI has vulnerabilities

11 [RESTRICTED] Most strikes against CUI do not lead to loss of service, but repeated impacts increase the likelihood of eventual failure. s 6(a) [redacted]

Impacts of a significant disruption

12 The Cook Strait power cables provide up to 30 percent of the North Island's power during peak demand periods. The network is likely to cope with a short duration outage but an outage lasting weeks could seriously impede the electricity system's ability to supply reliable power across New Zealand and could lead to substantially elevated wholesale electricity prices.[5]

13 [RESTRICTED] Feedback from industry indicates that if we lose one of the five current international cables, then we would not be noticeably impacted. This is because the cables are designed to have spare capacity, and the companies work cooperatively, so that the disrupted cable's traffic would be immediately rerouted s 6(a) [redacted]

[4] A digital transponder system broadcasting critical ship information such as position, speed, heading, and vessel identity.
[5] National Vulnerability Assessment 2023 developed by the New Zealand Lifelines Council.

The most effective hedge against disruption is having more CUI and having it more geographically dispersed

14 The more cables to which internet traffic can be redirected, the greater the cable network's resilience to damage-caused disruptions. Work has begun on one new international cable[6] and planning is in an advanced stage for another one [7].

15 [RESTRICTED] New Zealand's Cable Protection Zone regime partially mitigates the vulnerabilities identified above, with s 6(a) having cable protection zones and surveillance and warning regimes in place to reduce the chance of damage to their CUI. These are not in place for the remaining CUI, so in August 2025 officials partnered with Maritime New Zealand, Starboard Maritime Intelligence, Kordia, and the CUI providers to successfully pilot a National Surveillance and Warning Capability for all our CUI (see paragraph 18 below).

Review findings

16 We already have 12 of 16 international best practice recommendations in place, indicating that we are generally well set up. Whilst reducing our vulnerability by encouraging further market-led investments in CUI is working well, you noted the growing threat to CUI globally, our CUI vulnerabilities and the impact that any disruption could have and directed that 10 of the review's no-cost, low-effort options, that can be largely implemented from within your portfolios, be implemented. These would mitigate our greatest vulnerabilities, improve our ways of working with industry and regional partners and help retain attraction in new cable investments.

Implementation Progress

17 A summary of progress implementing these options is shown in Appendix 2 with the options depicted against each of the Maritime Security Strategy's pillars. Eight options are either in place or progressing as expected, including New Zealand's first cable break exercise on 10 March which you attended. Two options are dependent on partner activity:

17.1 Option 1.3: Establish a formal regime for risk and incident data sharing. s 9(2)(f)(iv) This will be considered in 2026.

17.2 [COMMERCIAL IN CONFIDENCE] Option 1.8: Explore the use of transmit AIS to broadcast CUI boundaries to mariners. This is being developed by Kordia, the only provider of this service in New Zealand, so we have no other option but to await Kordia's design proposal.

18 [SENSITIVE] The National Surveillance and Warning Capability s 9(2)(f)(iv) You may wish to launch this capability yourself alongside representatives from Starboard Maritime Intelligence (whose new office opening you attended in November), Kordia, Maritime New Zealand, and the Ministry. Your presence would support efforts to publicise this capability to New Zealand's mariners - whose behaviour we are attempting to amend - s 9(2)(f)(iv) Should you agree to launch the capability in-person, we will coordinate with your Office to facilitate your attendance, and that of the Minister NSI, should he wish to attend.

Next Steps

19 Officials will continue implementing the options as you have directed.

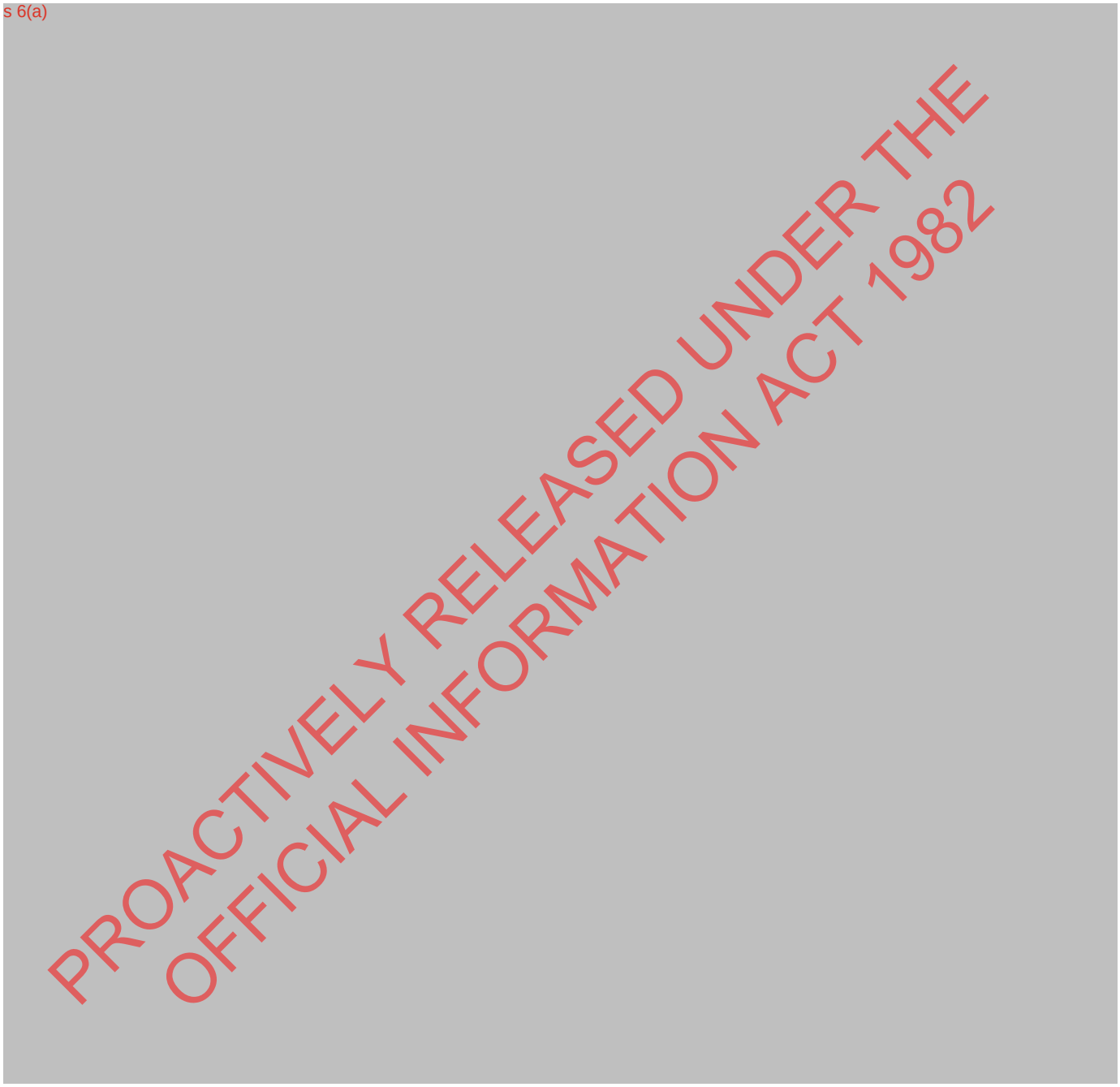
[6] Google's Honomoana cable due in 2026.
[7] Southern Cross Cables Ltd with a target date of 2027.

Annex 1 – What else are we already doing?

International support

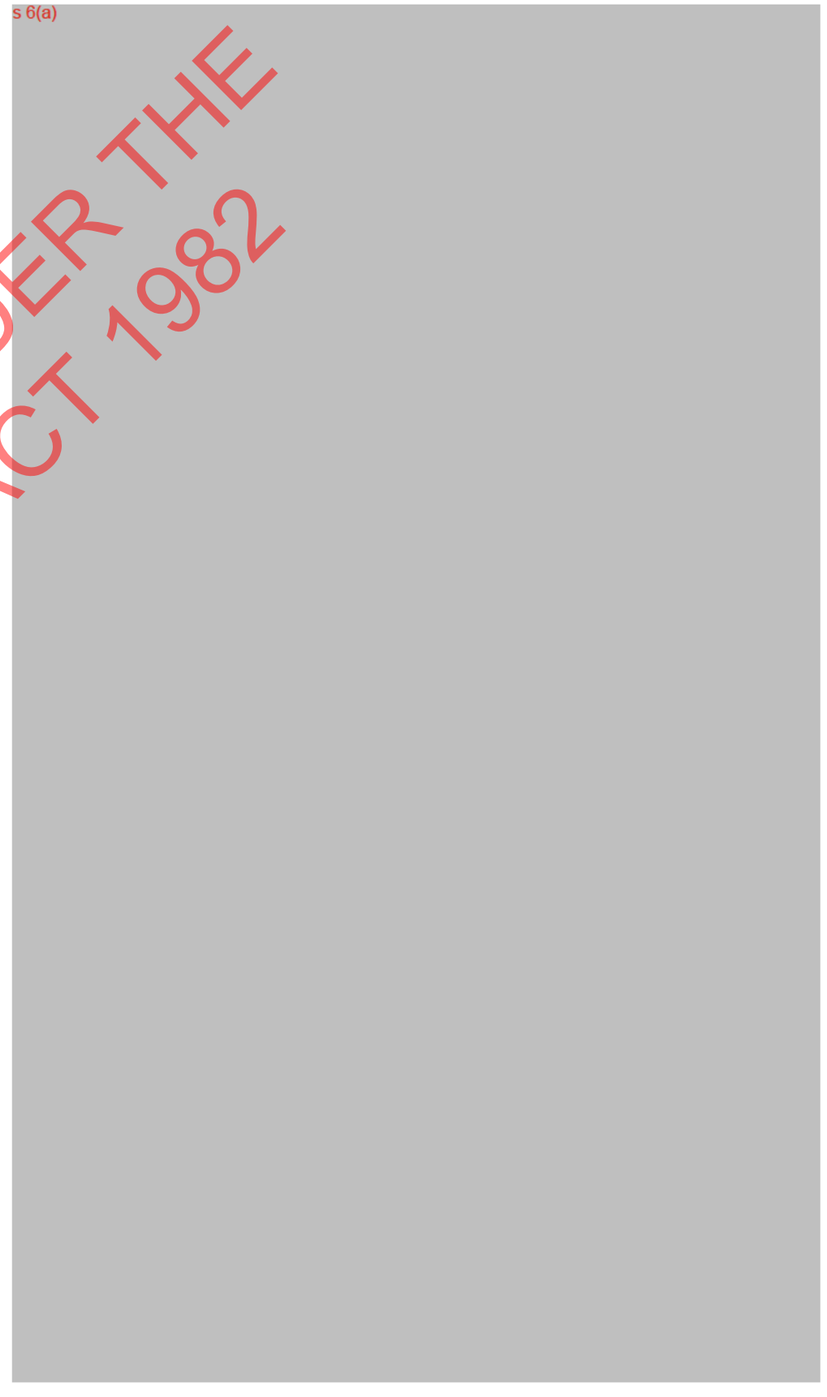
1 New Zealand has committed $90 million, via overseas development aid, to improve international and domestic connectivity across the Pacific through strategic investment in submarine cable infrastructure. This funding has enhanced connectivity, strengthened network resilience and redundancy, improved access, and reduced costs for users in the region[8].

s 6(a)



[8] Key initiatives supported include: 1. The Manatua Cable, connecting the Cook Islands and Niue to Samoa and French Polynesia; 2. The Southern Cross NEXT and ASN domestic cable, supporting connectivity in Tokelau; 3. Undersea telecommunications cable resiliency for Tonga through the construction of a second international undersea cable, and; 4. The Vaka Cable, linking Tuvalu via the Google cable system.

New Zealand's Critical Underwater Infrastructure Threat Assessment



(U) This assessment identifies locations where New Zealand's Critical Underwater Infrastructure (CUI) is more likely to be threatened based on the most common causes of damage globally. In scope are New Zealand's submarine telecommunication and electricity cables, including:

- (U) The Cook Strait High Voltage Direct Current (HVDC) cables connecting North and South Island electricity grids.
- (U) Domestic telecommunications cables providing inter-island and inter-regional connectivity.
- (U) International telecommunications cables connecting New Zealand to Australia, the United States and Pacific Countries.

(U The International Cable Protection Committee reports an average of 150-200 submarine cable faults per year, with 70% of these linked to human activity in the maritime domain:

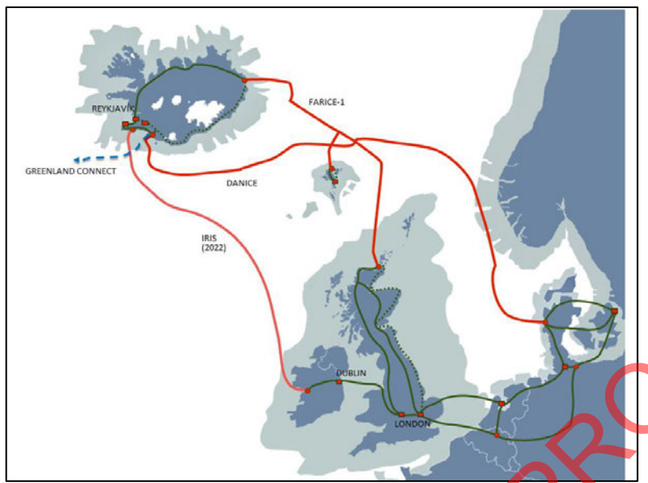
- (U) Fishing, including trawling in waters shallower than 1600m.
- (U) Anchoring, usually in waters shallower than 200m.
- (U) Dumping, oil and gas development, mining and construction in near shore areas.
- (U) Underwater currents and seismic activity.
- (U) Dredging, particularly near shipping channels and land reclamation areas.

International examples of cable damage impacts

Iceland Unplugged- Jan 2025

[RESTRICTED] The best comparable information we have to understand the impact of losing more than one telecommunications cable is from Iceland's January 2025 Iceland Unplugged exercise. The exercise was conducted in response to increasing incidents of cable damage in the Baltic Sea. Participants simulated a catastrophic event where all four international telecommunications cables connecting Iceland to Europe were severed.

As an island country with four international cable connections Iceland's experience is of such direct relevance that we judge that we do not need to model the impact on New Zealand currently. Following the exercise's findings, if more than one cable is lost, impacts to our global connectivity would involve overseas web pages not loading, causing loss of productivity.s 6(a)



Box 1: Iceland's four international telecommunications cables.

Tonga – Jan 2022

- In January 2022 Hunga Tonga–Hunga Ha'apai, a submarine volcano which is part of the subduction zone running from New Zealand to Fiji, erupted. The eruption cut Tonga's international cable connectivity completely.
- It took Cable Ship Reliance five weeks to restore connectivity by replacing 92 kilometres of cable because of the extensive damage from the eruption and subsequent tsunami, the inherent difficulty of accessing and repairing undersea cables, and the challenge of sourcing spare cable. The impact was significant with only 1-5% or internet coverage available through alternate satellite provision for those five weeks.


Tonga could be cut off from the outside world for more than two weeks, after volcano damages undersea cable

By Tahlea Aualiitia, Edwina Seselja and wires

Pacific Beat | Internet

Tue 18 Jan 2022

Watch 48s

The eruption sent enormous plumes of smoke and ash high into the atmosphere

Box 2: ABC article on the impact of Tonga's cable loss (18 January 2022)

Hawke's Bay Feb 2023

- The closest that New Zealand has come to experiencing the impacts of cable loss is the Tairāwhiti and Hawke's Bay experience of Cyclone Gabrielle impacting power to mobile phone masts and all telecoms-based functions.


Mobile and internet outages widespread as cellphone towers battered by Cyclone Gabrielle

Brianna McIlraith

February 13, 2023 · 1:39pm

Comment (6) Share

Box 3: Stuff article 13 February 2023.

Shetland Islands -Oct 2022

- The Shetland isles in October 2022 experienced the near total loss of connectivity which led to the declaration of a major incident and rapid deployment of police reinforcements to manage multiple incidents including increased risk of social disorder.

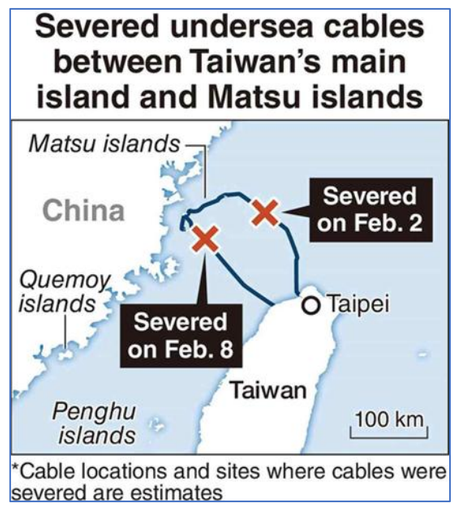

Shetland loses telephone and internet services after subsea cable cut

Police declare major incident as islanders warned it could take days for full services to be restored

Box 4: Guardian article on the loss of their single telecommunications cable (20 October 2022).

Matsu Island – Feb 2023

- Frequent cable breaks have occurred around Taiwan in recent years. In February 2023 the Taiwanese island of Matsu lost nearly all connectivity when its two telecommunications cables were cut.
- The island's 14,000 residents lost internet access and life ground to a standstill as commerce, banking, and emergency services were disrupted for several weeks.



Box 5: Reuters article (22 January 2025).

New Zealand Critical Underwater Infrastructure (CUI) Workstreams

Progress update depicted against Maritime Security Strategy pillars

RESTRICTED

Key:

- Workstream number: Workstream title (lead)
- Amber: Yet to commence
- Green: Commenced / Delivered

CUI Threat Assessment
(Maritime Security Oversight Committee Secretariat (MSOC) /Geospatial Intelligence New Zealand)

- Threats to CUI
- High risk areas

CUI Review
(MSOC Secretariat/MBIE/MOT/DPMC)

Critical Infrastructure (Cyber) Regime (DPMC)

Governance

- 1.5 Design and deliver national oversight for CUI (MSOC Sec)

Understand

- 1.1 Establish a National Surveillance and Warning Capability (MSOC Sec)
- 1.2 Explore whole of cable surveillance/warning co-operation (MSOC Sec)
- 1.3 Establish a formal regime for risk and incident data sharing (NMCC)
- 1.7 Commission biennial CUI Threat Assessments and reviews (MSOC Sec)

Engage

- 1.6 Explore appetite for a regional analysis for CUI repair capability uplift with regional government and industry partners (MSOC Sec)
- 1.8 Explore the use of transmit AIS to broadcast CUI boundaries to mariners (MSOC Sec)

Prevent

- 1.4 Conduct regular regional CUI disruption workshops and exercises (MSOC Sec)
- 1.9 Review options for amendment of the Submarine Cables and Pipelines Protection Act 1996 (MOT)

Respond

- 1.6 Explore appetite for a regional analysis for CUI repair capability uplift with regional government and industry partners (MSOC Sec)

- 1.10 Submit a standing effects-based task for immediate CUI surveillance for suspicious s 6(a) vessel behaviours (MSOC Sec)

Maritime Security Strategy Pillars