McGuinness Institute

OIA 2025/07 – Overseas dependencies and threats – Data centres and international submarine cables

Answers to Questions 14 to 19 Meeting 16 July 2025 with MBIE and MOT

14. Has a risk assessment been undertaken of disruptions to submarine cables (e.g. if an earthquake severs the undersea cables that connect New Zealand and Australia)? If yes, by whom and when?

- DPMC's <u>National Assessments Bureau (NAB)</u> undertake classified general risk assessments, including looking at maritime threats, to support decision making.
- There have been no risk assessments undertaken of disruptions to submarine cables.
- Government does not own or have a share in any of the submarine cables. Cable operators cooperate with each other, so for any planned or unplanned disruptions they divert data to operable cables.
- Cable disruptions are managed by having multiple cables, so that there is less dependency or reliance on any one cable.
- One key limitation regarding managing the risk to submarine cables is that parts of the cable sit outside New Zealand territory.

15. Does New Zealand have all the necessary skills and resources to repair a damaged cable if 10km of cable needs to be replaced between New Zealand and Australia without help from another country? If no, do New Zealand and Australia together have the necessary skills and resources to replace 10km cables, without any external help?

- It is not New Zealand's responsibility to repair the cables; rather, it is the responsibility of cable operators. Globally, repairs are done co-operatively at a regional level: New Zealand is in the South Pacific Marine Maintenance Agreement (SPMMA) area, where cable operators rely on cable company SubCom to maintain all cables. SubCom owns a cable ship, Reliance, which is based in Apia, Samoa and is responsible for maintenance in this region.
- At this stage, the government does not need to get involved because the market has been successfully managing cable repairs. For example, if a cable does go down for maintenance, data traffic will often shift to alternate cables and providers. The commercial owners of cables are incentivised to keep the cables working and fix any repairs as soon as possible.

16. This article notes, 'Any damage could take months to repair.' If all the skills and resources are available in New Zealand and Australia, what is the range if 10km of cable needs to be replaced (e.g. 1–3 months or 1–12 months)?

• Submarine cable operators will have their own commercial arrangements for submarine cable repairs, and so MBIE and MOT cannot comment on timeframes for repair. The timeframe for a repair would also depend on a range of factors (likely to be in the range of weeks, depending on the location or weather - see BBC article).

17. What is the plan B if the cables are disrupted? How would New Zealand transmit key data to the world and vice versa? Given that the volume of data is likely to be restricted during a disruption, has work been done to select what data should take precedence (e.g. financial data)?

- Plan B is satellite connections, e.g. Starlink and satellite-to-satellite connections, which would provide partial coverage. However, this offers significantly less capacity than the cables. It's a 'straw versus a fire hose'. 99.7% of our international internet traffic goes via cable.
- MBIE and MOT recommend engaging with submarine cable operators on this question.
 Submarine cable operators have contingencies to reroute traffic in the event of a submarine cable being damaged. However, if multiple cables were damaged at once, submarine cable operators may have their own arrangements with telecommunication providers to manage volume of data on a remaining cable until repairs can occur.

18. What protections and/or agreements are planned/in place to secure and protect our existing cables (e.g. underwater cameras, drones etc.)? Who is responsible for such plans for international submarine cables?

• See the answers in questions 14 and 15 above.

19. There is a number of <u>proposed cables</u> that are expected to be in operation in 2026, 2027 and 2028 (e.g. the SX Tasman Express, see <u>article</u>). Can you please list each of the existing and proposed undersea cables between Australia and New Zealand and advise who owns them? We want to understand whether New Zealand has control over the cables. Are any of the proposed cables being built or planned to be built between Australia and New Zealand owned by the New Zealand Government or in collaboration with the New Zealand Government? If yes, are they on time and within budget? Further, please indicate if the resulting capacity will include a degree of redundancy and if yes, how is that redundancy being calculated?

- See a list of all current and planned cables in the <u>Submarine Cable Map</u> (filter for New Zealand).
- New Zealand does not own or operate any cables or have any shares in existing cables.

Other more general notes discussed at the meeting

- AI will have a big impact on the level of traffic through undersea cables; more cables will be required in the future.
- The New Zealand Energy Strategy will discuss the need for growth in the power grid in New Zealand as a result of AI.
- The global rise in shipping has caused increased cable disruptions.
- There is increased vertical and horizontal intergradation occurring in the data sharing industry. For example:
 - 1. Google inks \$3B deal to buy hydropower from Brookfield (15 July 2025)
 - 2. Three Mile Island nuclear plant will reopen to power Microsoft data centers (24 September 2024)
 - 3. Data centres ride AI boom in world with finite renewable energy supplies (13 December 2024)
- To summarise: The Institute reiterated that undersea cables and the wider industry in which it sits is undergoing significant change, and the government needs to be aware of the extent the industry is integrating and attempting to create long-term dependencies through owning power, data centres and possibly undersea cables.